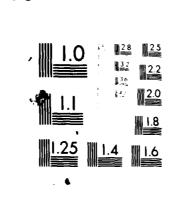
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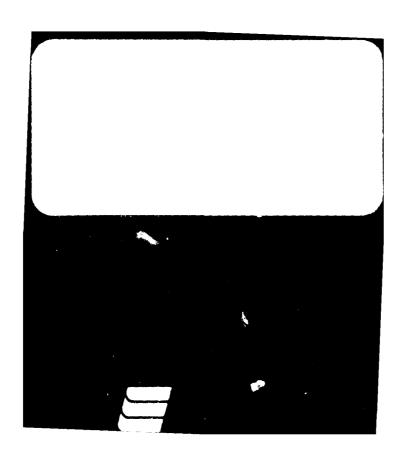
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## MX SYSTEM SITING SUMMARY REPORT

## LAND ACQUISITION APPLICATION PACKAGE MAP SHEETS

VOLUME III

## Prepared for:

U.S. Department of the Air Force Ballistic Missile Office Norton Air Force Base, California 92409

Prepared by:

Ertec Western, Inc. 3777 Long Beach Boulevard Long Beach, California 90807

18 January 1982

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### **FOREWORD**

This report has been prepared for the U.S. Department of the Air Force, Ballistic Missile Office, in compliance with Contract No. F04704-80-C-0006. It presents the summary of Ertec Western's investigations for siting of facilities and routing of a transportation network for the MX system in Nevada, Utah, and New Mexico. Information, results, and conclusions contained in this report are based on MX siting studies conducted during fiscal years 1980 and 1981. The major part of the study covers 37 deployment valleys and three main operating base sites in Nevada and Utah. Limited studies were also performed in the area surrounding the main operating base site in New Mexico. This report consists of three volumes.

## Volume I, Part I

- o General Introduction providing brief overviews of the MX system, program schedule, and siting program which includes:
  - Introduction
  - Summary of MX System Components
  - MX Program Schedule Overview
  - Siting Program Overview

## Volume I, Part II

- o Summary discussions of results, conclusions, and recommendations of the Shelter Siting Summary studies of the 37 deployment valleys which includes:
  - Introduction
  - Siting Requirements
  - Siting Methodology
  - MPS/HSS Siting Program, Nevada/Utah DDA
  - Shelter Siting Program Summary, Conclusions, and Recommendations

## Volume II, Part I

- o Results and conclusions of the Designated Transportation Network/Area Support Centers (DTN/ASC) siting studies within the MX system study areas which includes:
  - Introduction
  - Objective and Scope
  - Methodology
  - Criteria
  - Field Reconnaissance and Pass Evaluation
  - Evaluation of Optimum DTN Routings and ASC Locations
  - Conclusions

## Volume II, Part II

- o Results and conclusions of the Operational Base Test Site/ Designated Training Area (OBTS/DTA) siting studies near the main operating base sites in Nevada-Utah and New Mexico which includes:
  - Introduction
  - Siting Requirements
  - Methodology
  - OBTS/DTA Siting Evaluation
  - Conclusions

## Volume III

- o Land Acquisition Application Package Map Sheets depicting the various preferred and alternate facility combinations for land parcel acquisition which includes:
  - Introduction

This report was being prepared prior to the President's decision on 2 October 1981 not to proceed with the MPS MX basing option. It was intended that more detailed valley siting reports would follow this general evaluation. The original objective of the report was to provide interim data to the users of MX siting data until these more detailed evaluations could be produced. As a result of the President's decision, this report represents the final summary of the MX system siting in the MPS basing mode.

It should be noted that at the beginning of FY 81, siting studies were performed under the firm name of Fugro National, Inc. at its Long Beach offices. On 25 March 1981, the corporate name was changed to The Earth Technology Corporation - Ertec. Since that date, the siting studies have been performed at the same offices under the name of Ertec Western, Inc. with support from Ertec Northwest, Inc., Seattle, Washington; Ertec Airborne Systems, Inc., Cypress, California; and Ertec Rocky Mountain, Inc., Denver, Colorado.

1

## LIST OF ACRONYMS

ADT Average Daily Traffic AFRCE-MX Air Force Regional Civil Engineer-MX **AFSC** Air Force System Command ALCC Airborne Launch Control Center AOB Auxiliary Operating Base **ASC** Area Support Center BLM Bureau of Land Management **BMO** Ballistic Missile Office c3 Command, Control, and Communication **CBR** California Bearing Ratio CDP Candidate Deployment Parcel CEO Council on Environmental Quality Cluster Maintenance Facility CMF COE U. S. Department of the Army, Corps of Engineers Conterminous United States CONUS Cone Penetrometer Test CPT Cluster Road Network CRN Candidate Siting Region CSR DAA Designated Assembly Area DDA Designated Deployment Area DEIS Draft Environmental Impact Statement DMA Defense Mapping Agency Description of Proposed Actions and Alternatives DOPAA DTA Designated Training Area DTN Designated Transportation Network EIS Environmental Impact Statement Federal Land Policy Management Act FLPMA FNI Fugro National, Inc. **FSED** Full Scale Engineering Development FY Fiscal Year Great Basin National Park **GBNP** HDR Henningson, Durham, & Richardson, Inc. Horizontal Shelter Site HSS IOC Initial Operational Capability Known Geothermal Resources Area KGRA MF Medium Frequency MMC Martin Marietta Company MOA Military Overflight Area MOB Main Operating Base Multiple Protective Structure MPS MPT Mobile Patrol Teams NCA National Control Authorities NEPA National Environmental Policy Act NH&S Nuclear Hardness and Survivability OB Operational Base Operational Base Test Site OBTS

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| Operational Support Road              |
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| Quality Assurance                     |
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| Real Estate Planning Report           |
| Renewable Energy Sources              |
| Ralph M. Parsons Company              |
| Right-of-way                          |
| Remote Surveillance Site              |
| Strategic Air Command                 |
| Strategic Arms Limitation Talks       |
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| Special Transport Vehicle             |
| Threatened and Endangered             |
| Transporter and Erector Launcher      |
| Technical Interchange                 |
| Test Support Building                 |
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### 1.0 INTRODUCTION

This volume presents the maps coordinated and produced by Ertec Western, Inc. (Ertec) for the first increment of the land acquisition application package. These maps depict the initial MX system proposed land requirements for Nevada-Utah.

The land acquisition package consisted of the following elements:

- o A regional map at a scale 1:500,000 showing the 37-valley system with the area clustered, the connecting DTN, the ASC sites, and the cluster counts for each valley;
- o Base maps at a scale of 1:62,500 depicting the IOC valley facilities, the Main Operating Base/Designated Assembly Area (MOB/DAA), and the Operational Base Test Site/Designated Transportation Area (OBTS/DTA) site options with associated right-of-way alignments; and
- o Land parcel descriptions of all facilities (legal descriptions) depicted at 1:62,500.

The detailed depictions and parcel descriptions of the remaining system depicted on the regional map were to be provided in later increments.

The initial increment of the package containing the regional and the 1:62,500 "E" size map sheets (36 by 48 inches [91 by 122 cm]) with land parcel descriptions was delivered to the AFRCE-MX on 17 September 1981. After the AFRCE-MX review, revisions were made and a second delivery of the map sheets occurred on 2 October 1981. For ease of presentation in this volume, the revised "E" size map sheets were reduced 50 percent from 1:62,500 to 1:125,000 scale. Drawing 3-3 of the Shelter

🛎 Ertec

Siting Summary (Volume I, Part II) is a sample full "E" size map sheet.

The third element of the land acquisition application package consists of parcel descriptions. These have been discussed in other parts of this report and are explained below.

Parcel descriptions of the IOC valley facilities and the OBTS/DTA sites are presented in Appendix G of the Shelter Siting Summary (Volume I, Part II) and Appendix C of the OBTS/DTA Siting (Volume II, Part II), respectively. A general discussion of land acquisition application support appears in Section 4.2.4 of the General Introduction (Volume I, Part I). More specific discussions are in Sections 4.6 and 5.1.3 of the Shelter Siting Summary and Section 4.7 of the OBTS/DTA siting. The land parcel descriptions produced by the base comprehensive planner (EDAW, Inc.) of the MOB/DAA are not presented.

The following reduced revised map sheets are in the first increment of the land acquisition application package (Figures 1-1 through 1-36).

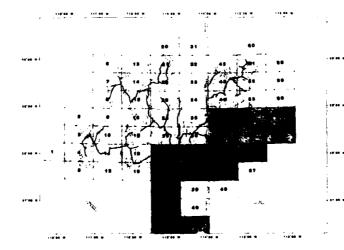
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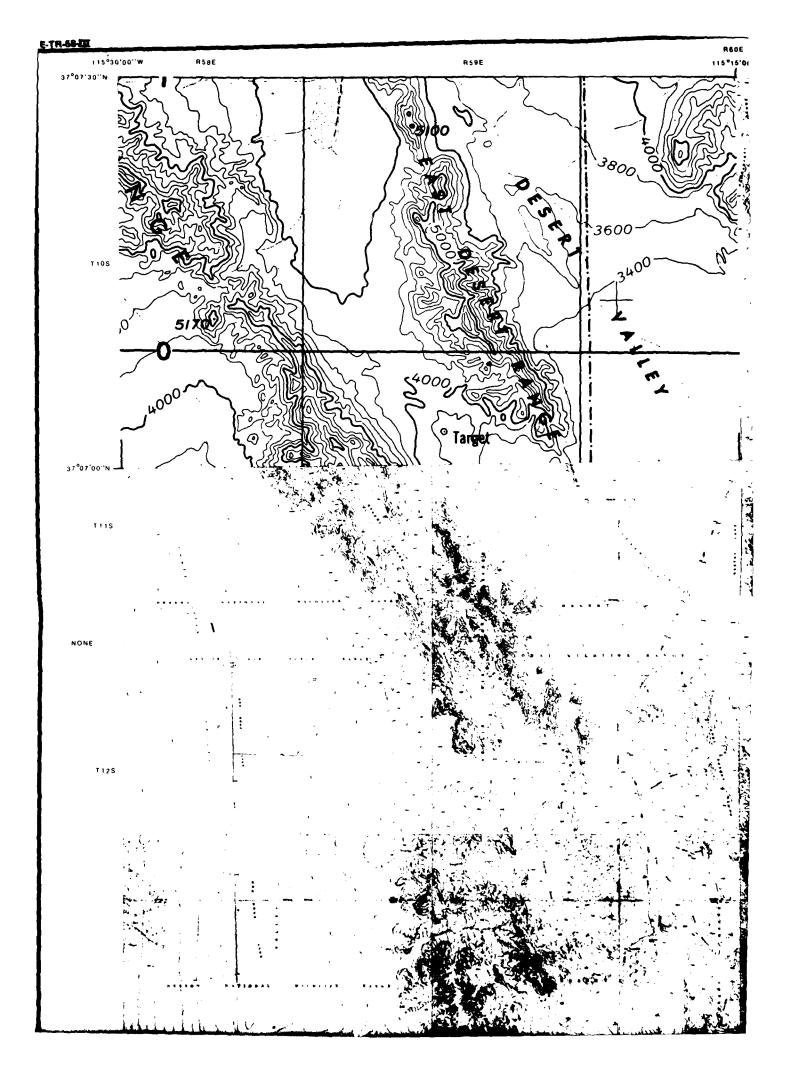
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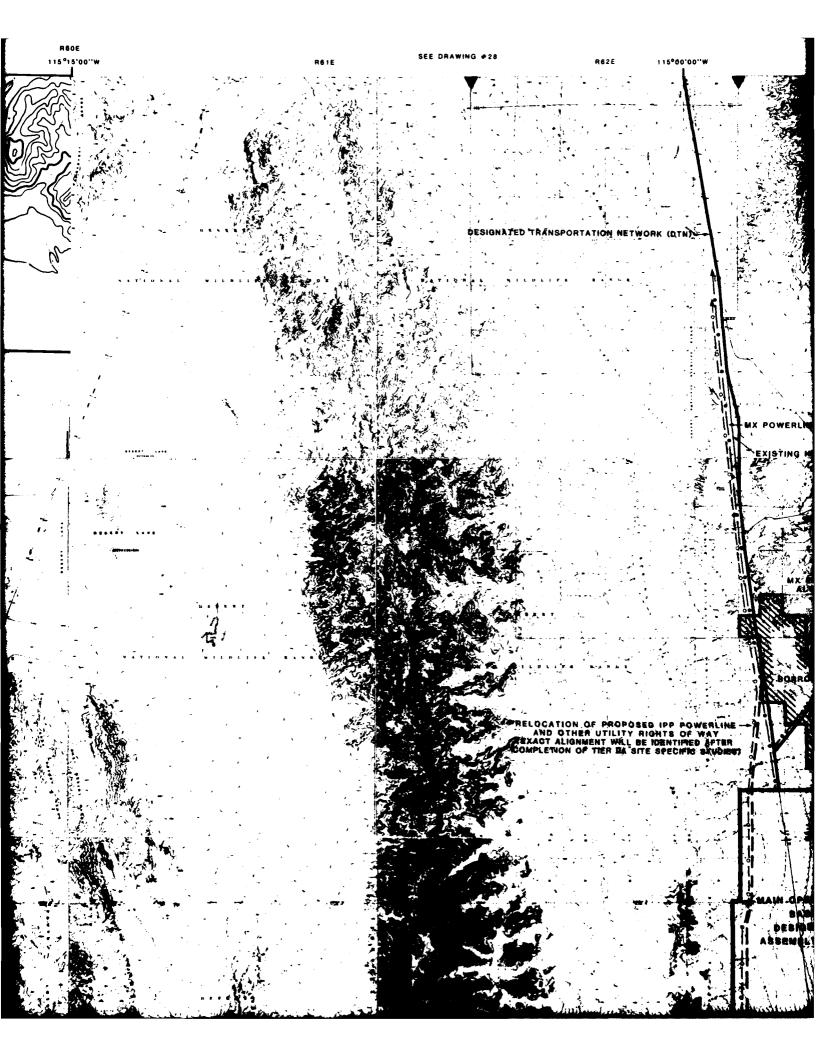


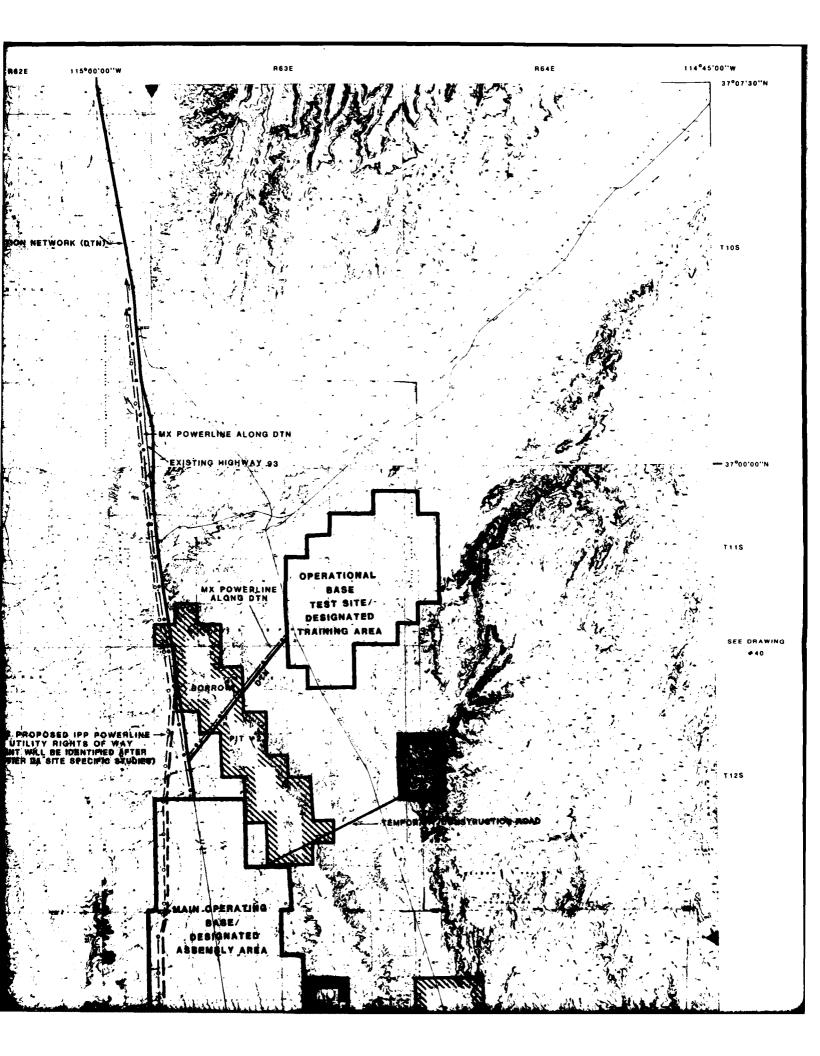
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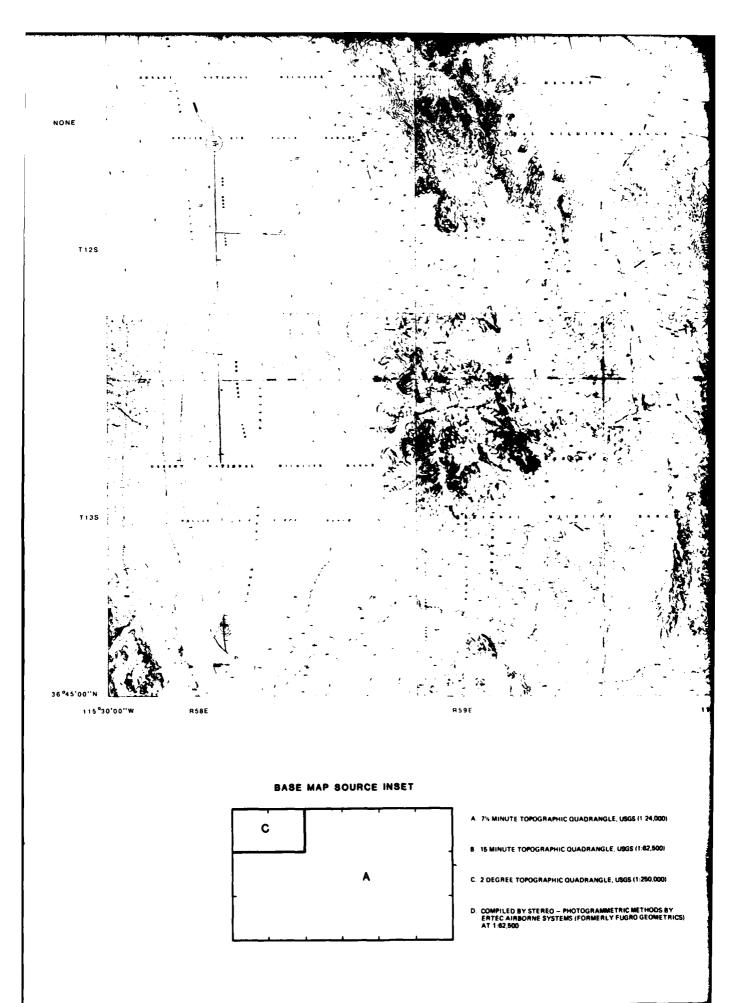
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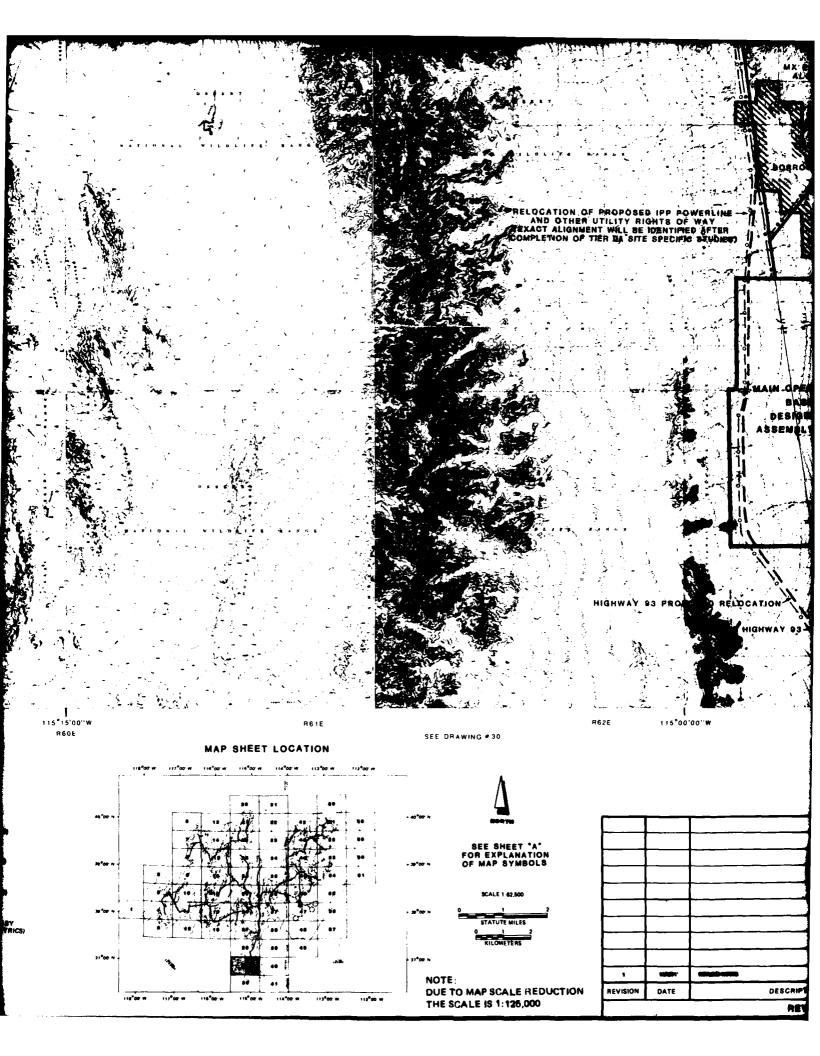
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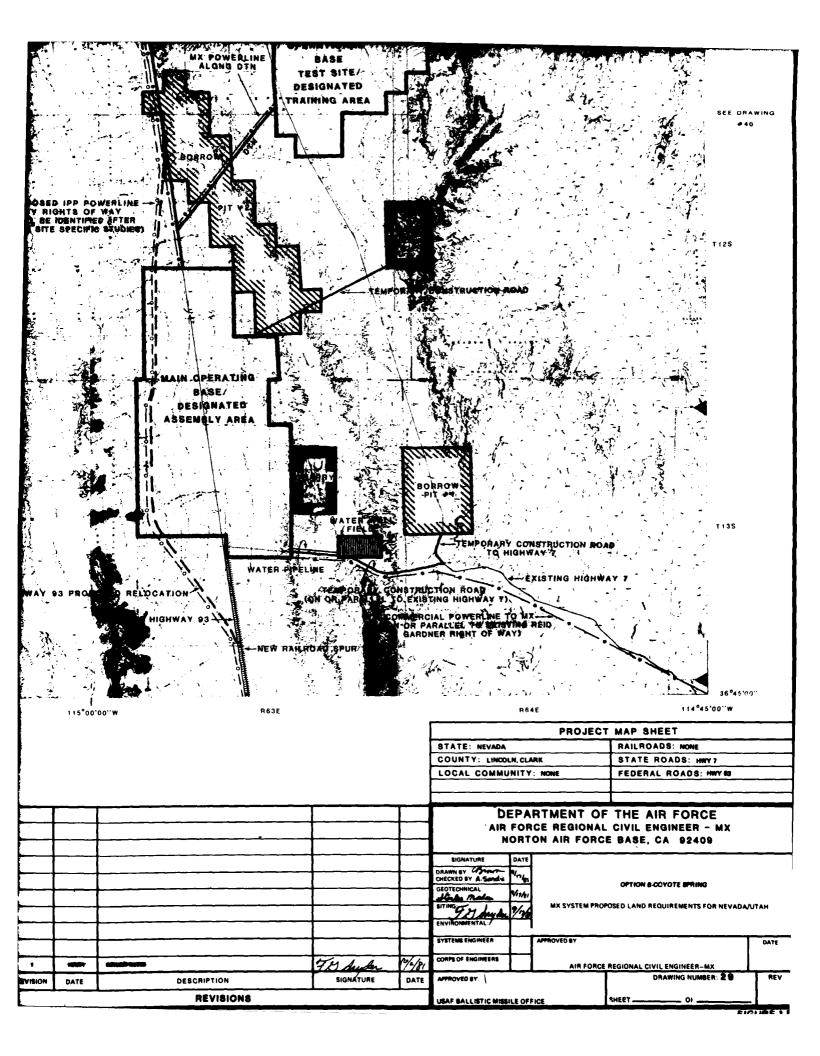


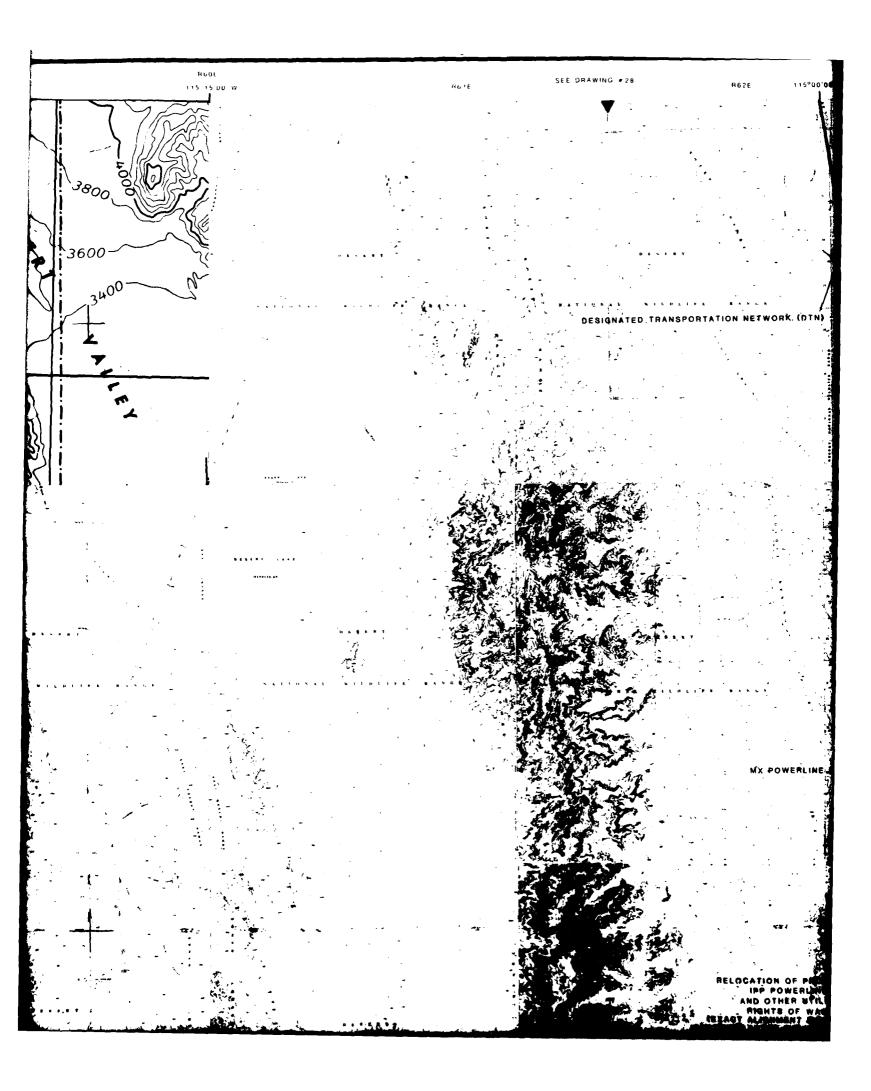


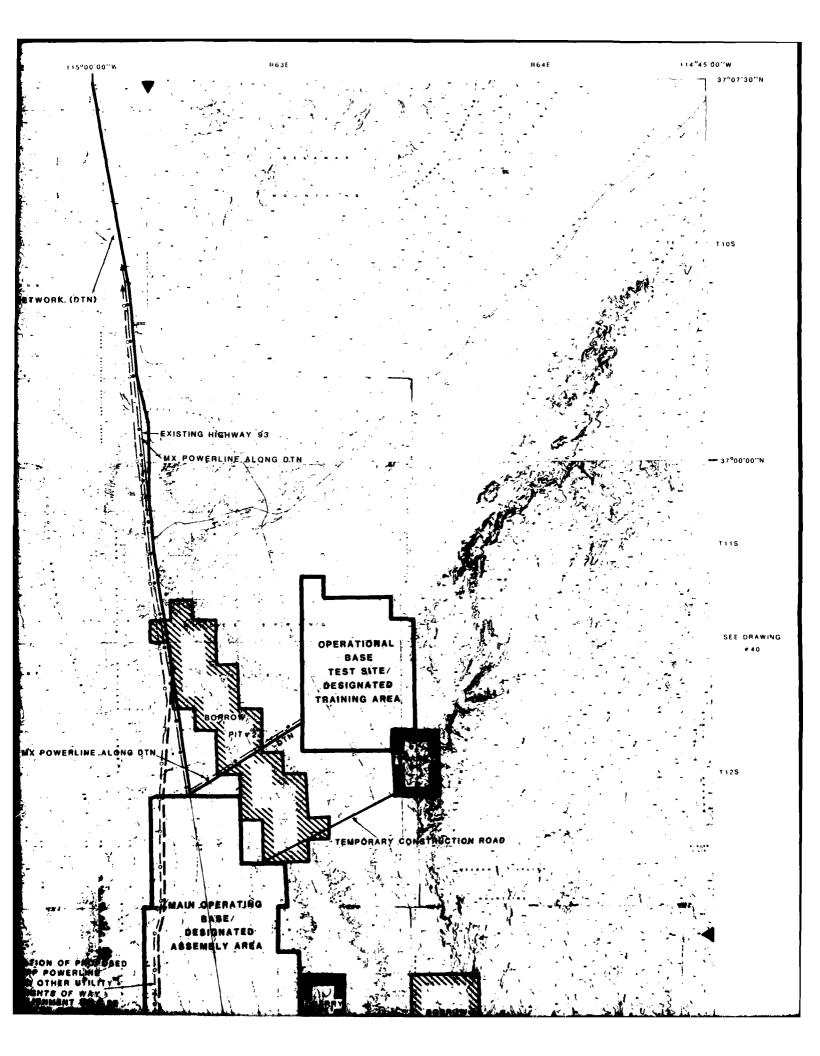


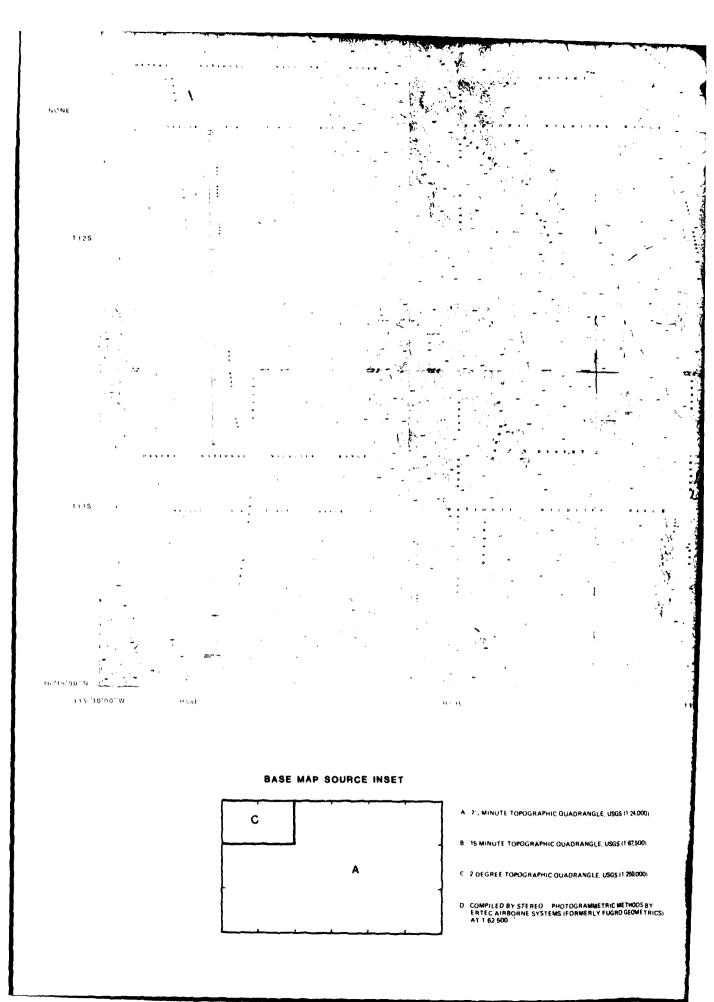


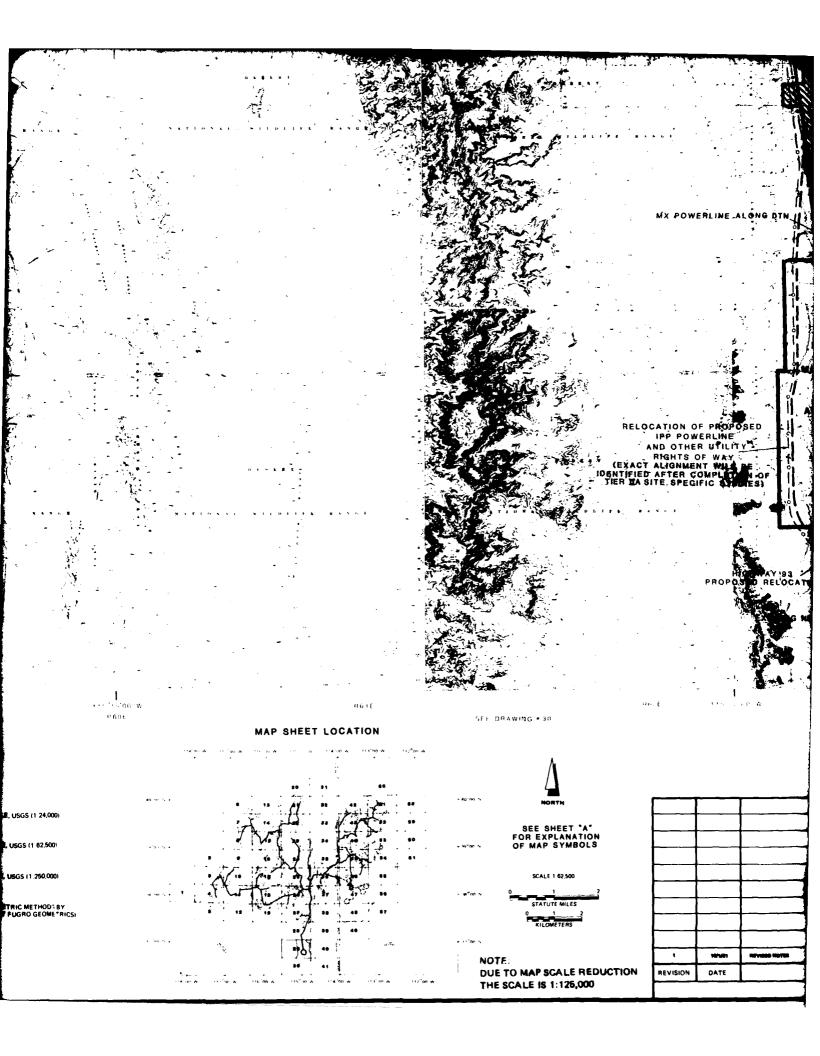


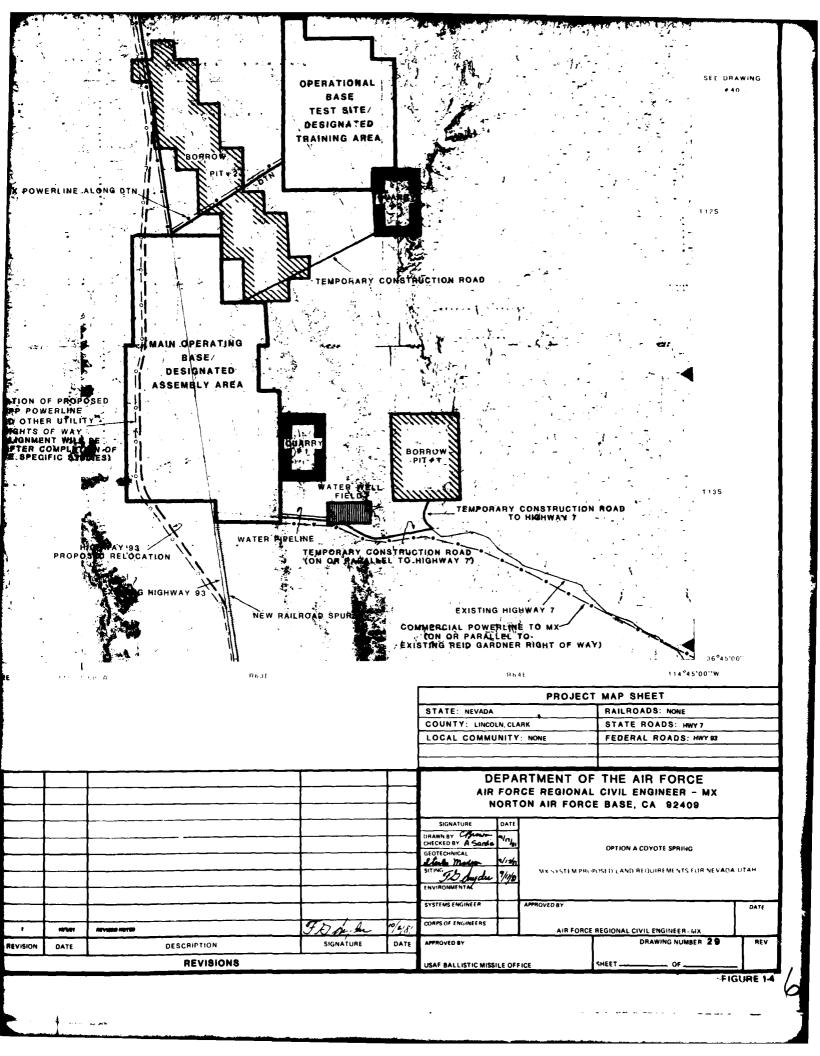












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- 1. THE INDEX MAP AT THE LEFT DEPICTS THE ORIENTAL MAP CELLS RELATIVE TO THE PROPOSED MX DEPLOYMENT NEVADA AND UTAH. TO PRODUCE "E" SIZE DRAWINGS, A GRID WAS GENERATED FROM AN ORIGIN AT 39°N LATITUE LONGITUDE. EACH CELL COVERS A GROUND DISTANCE OF 24 MILES BY 40 MILES (22.5 MINUTES CF LATITUDE BY OF LONGITUDE) AND IS ASSIGNED AN INDEX NUMBER AS INDEX MAP AT THE LEFT. THE GRID WAS GENERATED TO THE OUTER HYDROGRAPHIC BASIN BOUNDARIES INCLUDED WHICH INCLUDES THE 36 VALLEYS IN NEVADA AND UTAH PRELIMINARY SITING OF THE HORIZONTAL SHELTER SITE MAINTENANCE FACILITIES, CLUSTER ROADS, BARRIERS, THE AREAS WHERE THE DESIGNATED TRANSPORTATION NEW AREA SUPPORT CENTERS, AND OPERATING BASE OPTIONS
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- 3. THE CONTOUR BASE MAPS ARE PHOTOGRAPHIC COMPIL
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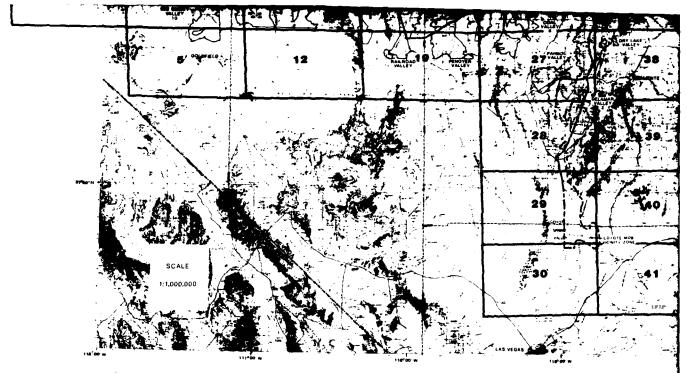
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## SYMBOLS USED ON 1:62.500 MAPS

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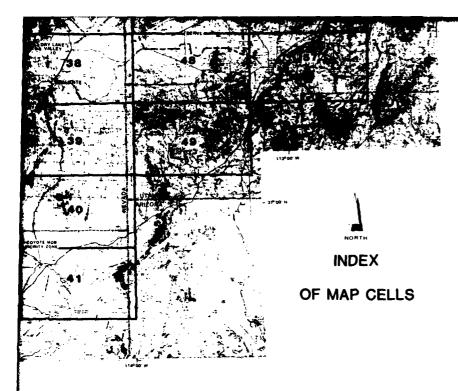
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| ⇔—        | CLUSTER MAINTENANCE FACILITY (CMF)                                  |
| <b>-</b>  | HORIZONTAL SHELTER SITES (HSS)                                      |
| ı         | BARRIER   |
| 1         | CLUSTER NUMBER  |
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| МА        | IN OPERATING BASE LAYOUTS   |
|           | ACCESS ROAD OR TEMPORARY CONSTRUCTION ROAD                          |
|           | WATER PIPELINE  |
|           | MX POWERLINES   |
| -0-       | PROPOSED INTERMOUNTAIN POWER PROJECT (IPP) POWERLINES               |
| 0         | RELOCATION OF PROPOSED INTERMOUNTAIN POWER PROJECT (IPP) POWERLINES |
| *******   | RAILROAD SPUR OR SIDING   |
|           | BORROW PIT  |
| $\square$ | QUARRIES  |
|           | WATER FIELD   |



NOTE: DUE TO MAP SCALE REDUCTION THE SCALE IS 1:2,000,000

## MAP CELL CROSS REFERENCE INDICES

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|---|--|--|----------------|---|------------------|---|--------------|
| UTAH  |  |  |                | NEVADA  |                  | NEVADA  | UTAB         |
| DUGWAY<br>FISH SPRINGS FLAT<br>PINE<br>SEVIER DESERT<br>SEVIER LAKE<br>SNAKE<br>TULE<br>WAH WAH | 5<br>2<br>5<br>2<br>1<br>19<br>10<br>5 | 51, 52<br>42, 51, 52<br>45, 46, 47<br>51, 52<br>53, 54<br>33, 34, 35, 42, 43, 44, 45, 46<br>43, 44, 45<br>45, 46, 54 | 1*<br>2<br>3   | BIG SMOKY<br>BIG SMOKY<br>REVEILLE<br>BIG SMOKY<br>REVEILLE | 19<br>20<br>21   | GARDEN PENOYER REVEILLE RAILROAD BUTTE LONG BUTTE     |              |
| WHIRLWIND   | 12                                     | 52, 53   | 5              | BIG SMOKY   |                  | LONG  |              |
| NEVADA  ANTELOPE BIG SAND SPRINGS   | 4 3                                    | 7, 8, 14, 15·<br>16, 17  | 6<br>7         | KOBEH<br>ANTELOPE<br>KOBEH                                  | 22               | BUTTE<br>JAKES<br>LONG<br>NEWARK                      |              |
| BIG SMOKY<br>BUTTE<br>CAVE  | 10<br>9<br>3                           | 2, 3, 4, 5<br>20, 21, 22<br>24, 25, 35, 36   | 8              | MONITOR<br>ANTELOPE<br>MONITOR                              | 23               | JAKES<br>NEWARR<br>RAILROAD                           |              |
| COAL<br>DELAMAR   | 6<br>3                                 | 26, 27<br>27, 28   | 9              | MONITOR   |                  | WHITE RIVER   | 1            |
| DRY LAKE<br>GARDEN<br>HAMLIN  | 10<br>6<br>10                          | 26, 27, 37, 38<br>18, 19, 25, 26, 27<br>35, 36, 45, 46, 47   | 10             | NOT CREEK<br>MONITOR<br>RALSTON                             | 24               | CAVE<br>RAILROAD<br>WHITE RIVER                       |              |
| HOT CREEK JAKES KOBEH LAKE LITTLE SMOKY LONG  | 6<br>3<br>5<br>7<br>4                  | 10, 11, 16, 17, 18<br>22, 23<br>6, 7, 13, 14<br>35, 36, 37<br>14, 15, 16<br>20, 21, 22                               | 11             | STONE CABIN HOT CREEK REVEILLE RALSTON STONE CABIN          | 25               | Cave<br>Garden<br>Mulesnoe<br>Railroad<br>White River |              |
| MONITOR<br>MULESHOE<br>NEWARK   | 6<br>3<br>5                            | 7, 8, 9, 10<br>25, 26, 36, 37<br>14, 15, 22, 23  | 12<br>13       | REVEILLE<br>KOBEH   | 26               | DRY LAKE<br>COAL<br>GARDEN                            | 1            |
| Pahroc<br>Penoyer<br>Railroad<br>Ralston<br>Reveible  | 3<br>5<br>13<br>9<br>3                 | 27<br>18, 19<br>15, 16, 17, 18, 19, 24, 25<br>3, 4, 10, 11<br>11, 12, 18, 19   | 14             | ANTELOPE<br>KOBEH<br>LITTLE SMOKY<br>NEWARK                 | 27               | MULESHOE<br>COAL<br>DELAMAR<br>DRY LAKE<br>GARDEN     | İ            |
| SPRING<br>STONE CABIN<br>WHITE RIVER  | 4<br>8<br>12                           | 35, 36<br>10, 11<br>24, 25   |                | Antelope<br>Little Smoky<br>Newark<br>Railroad              | 28               | PARROC<br>DELAMAR                                     | 1            |
|   |  |  | 16             | BIG SAND SPRINGS<br>HOT CREEK<br>LITTLE SMOKY<br>RAILROAD   | 29<br>30*<br>31* | COYOTE SPRING MOB                                     |              |
|   |  |  | 17             | BIG SAND SPRINGS<br>HOT CREEK<br>RAILROAD                   | 32*<br>33<br>34  |   | SNA <b>S</b> |
|   |  |  | 18             | Garden<br>Hot Creek<br>Penoyer<br>Reveille<br>Railroad      | 35               | CAVE<br>MARLIN<br>LAKE<br>SPRING                      | SNAT         |
|   |  |  | *CELL DOE      | S NOT INCLUDE VALLEY  | WITH MPS         | LAYOUT  | - 1          |



### INDICES

| NAME                 | CELL<br>NUMBER | VALLEY NAM             | <u>1E</u>   | CELL<br>NUMBER | VALLEY NAM | <u>ie</u>                |
|----------------------|----------------|------------------------|---|----------------|------------|--------------------------|
| UTAH                 |                | NEVADA                 | UTAH  |                | NEVADA     | UTAH                     |
| <u>.</u>             | 36             | CAVE<br>HAMLIN<br>LAKE |   | 53<br>54       |            | SEVIER LAKE<br>WHIRLWIND |
| Ab                   |                | MULESHOE<br>SPRING     |   |                |            | SEVIER LAKE<br>Wah wah   |
| •                    | 37             | ORY LAKE               |   | 55*            |            |                          |
|                      |                | MULESHOE               |   | 56<br>57*      |            | MILFORD MOB              |
|                      | 38             | DRY LAKE               |   | 58*            |            |                          |
| ŧ                    | 39 *           |                        |   | 59*            |            |                          |
|                      | 40*            |                        |   | 60*            |            |                          |
|                      | 41*            |                        |   | 61*            |            |                          |
| no.                  | 42             |                        | PISH SPRINGS FLAT<br>SNAKE                                | •              |            |                          |
| RIVER<br>RO<br>RIVER | 43             |                        | FISH SPRINGS PLAT<br>SNAKE<br>TULE<br>WHIRLWIND           |                |            |                          |
| DE<br>Bo             | 44             |                        | snake<br>Tule<br>Whirlwind                                |                |            |                          |
| RIVER<br>RE          | 45             | HAMLIN                 | Pine<br>Snake<br>Tule<br>Wah wah<br>Whirlwind             |                |            |                          |
| og                   | 46             | HAMLIN                 | PINE<br>Snake<br>Wah wah                                  |                |            |                          |
|                      | 47             |                        | Hamlin<br>Pine<br>Beryl Mob<br>Milford Mob                |                |            |                          |
| SPRING HOB           | 48             |                        | BERYL MOB   |                |            |                          |
| Ì                    | 49*            |                        |   |                |            |                          |
| ĺ                    | 50◆            |                        |   |                |            |                          |
| Shake<br>Shake       |                |                        | DUGWAY<br>FISH SPRINGS PLAT<br>SEVIER DESERT<br>WHIRLMIND |                |            |                          |
| SNARE                | 52             |                        | Dugway<br>Pish Springs Plat<br>Sevier Desert<br>Whirlwind |                |            |                          |

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NEGATIVES WERE BUTT SPLICED AND EDGE MAY
GRAPHIC CONTINUITY WHERE POSSIBLE. WHEN
TERED, SPLICING WAS PERFORMED SO AS TO M
TROL AT MAP GRID CELL CENTER.

IN SOME INSTANCES WHERE USGS PUBLISHED M

ERTEC AIRBORNE SYSTEMS (FORMERLY PUGRO OF 1:62,500 SCALE TOPOGRAPHIC MAPS FROM AER ON SOME OF THE FOLLOWING MAPS THE CULTUR CURRENT DUE TO THE AGE OF THE AVAILABLE SUBSEQUENT REVISIONS WILL INCORPORATE TO AS THEY BECOME AVAILABLE FROM THE USGS.

- 4. M.P.S. LAYOUTS ARE BASED ON BMO/AFROMENTS OF 6 JUNE 1980 AND SUBSEQUENT DIRECTIONS OF 6 JUNE 1980 AND SUBSEQUENT DIRECTIONS OF ANGLE OFFSET BETWEEN AND A DIRECT CONNECT ROAD PATTERN (SCHEME LOCATIONS. SHELTERS ARE GROUPED TO FORM 23 PRIMARY SHELTERS. EACH CLUSTER IS IN EACH SHELTER BY TWO NUMBERS, THUS EACH MERRY A NUMBERICAL INDEX OF WHICH THE FIN NUMBER AND THE LAST SINGLE OR DOUBLE DIG NUMBER WITHIN THAT CLUSTER (1-23). EXCHANGES OF LAKE, PINE, WAH-WAH) NONE OF SITED BY SITE SPECIFIC FIELD SURVEYS.
- 5. MAP SYMBOLS SHOWN IN THE EXPLANATION
  TO THE INFORMATION PLACED ON THESE MAPS
  AN EXPLANATION OF SYMBOLS FOR THE USGS INCLUDED. IT IS ASSUMED THAT THE READER
  STANDARD USGS TOPOGRAPHIC MAPPING SYMBOX
- 6. THE DTN ROAD ALIGNMENTS IN THE 1:62,
  THE APPROXIMATE CENTER LINE OF THE PROPO WHERE THESE PROPOSED ALIGNMENTS DEPART I TANGENT LINE SEGMENTS ARE USED TO INDICA THESE TANGENT LINE SEGMENTS HAVE NOT COM-DESIGN RADII OF CURVATURE.
- 7. THE O.B. AND O.B.T.S. BOUNDARIES, STALE REPRESENT A GENERALIZED SITING ARE NEAREST ONE-QUARTER SECTION. FINALIZATION FACILITY LOCATION WILL BE WITHIN THIS AN AREA THAN IS ENCLOSED BY THE CURRENT DES
- 8. THE MATERIAL SITES BOUNDARIES SHOWN
  GENERALIZED AREAS DELINEATED TO THE NEAS
  SECTION. FINALIZATION OF THE SPECIFICS
  WILL DICTATE WHETHER THE IDENTIFIED MASS
  USED AND TO WHAT EXTENT THEY ARE TO BE

| REVISION | DATE | DESCH |
|----------|------|-------|
|          |      | •     |

REDUCED, COPIED, OR ENLARGED TO ABOUT 1:62,500 MAP SCALE. THE
NEGATIVES WERE BUTT SPLICED AND EDGE MATCHED TO MAINTAIN
GRAPHIC CONTINUITY WHERE POSSIBLE. WHEN OFFSETS WERE ENCOUNTERED, SPLICING WAS PERFORMED SO AS TO MAINTAIN MAXIMUM CONTROL AT MAP GRID CELL CENTER.

IN SOME INSTANCES WHERE USGS PUBLISHED MAPS WERE NOT AVAILABLE, ERTEC AIRBORNE SYSTEMS (FORMERLY FUGRO GEOMETRICS) PRODUCED 1:62,500 SCALE TOPOGRAPHIC MAPS FROM AERIAL PHOTOGRAPHS.

ON SOME OF THE FOLLOWING MAPS THE CULTURAL FEATURES ARE NOT CURRENT DUE TO THE AGE OF THE AVAILABLE BASE MAPS.

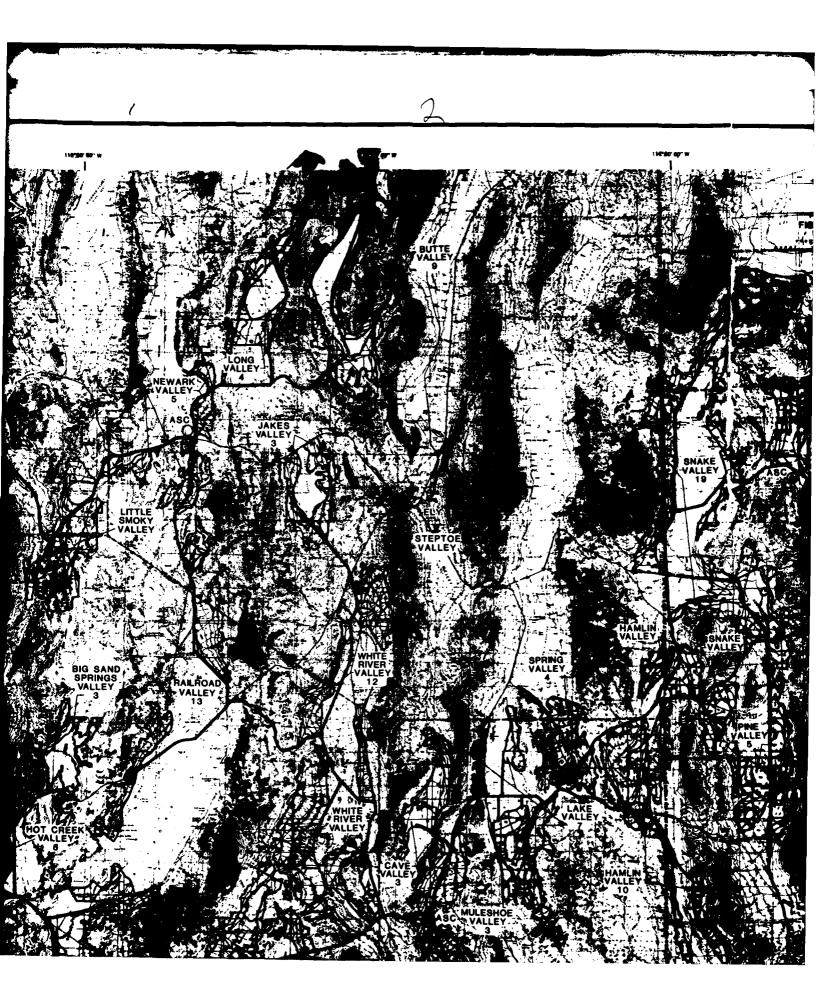
SUBSEQUENT REVISIONS WILL INCORPORATE THE MOST CURRENT DATA AS THEY BECOME AVAILABLE FROM THE USGS.

- 4. M.P.S. LAYOUTS ARE BASED ON BMO/AFRCE-MX SITING REQUIREMENTS OF 6 JUNE 1980 AND SUBSEQUENT DIRECTIVES. THE GEOMETRY
  UTILIZES 5200-FT HORIZONTAL SPACING, 2/3 FILLED HEXAGONAL
  PATTERN, MINIMUM 55° ANGLE OFFSET BETWEEN ADJACENT STRUCTURES
  AND A DIRECT CONNECT ROAD PATTERN (SCHEMATIC) BETWEEN SHELTER
  LOCATIONS. SHELTERS ARE GROUPED TO FORM IN CLUSTERS EACH OF
  23 PRIMARY SHELTERS. EACH CLUSTER IS IDENTIFIED BY A NUMBER;
  EACH SHELTER BY TWO NUMBERS, THUS EACH HORIZONTAL SHELTER SITE
  BEARS A NUMERICAL INDEX OF WHICH THE FIRST DIGIT IS THE CLUSTER
  NUMBER AND THE LAST SINGLE OR DOUBLE DIGIT IS THE SHELTER
  NUMBER WITHIN THAT CLUSTER (1-23). EXCEPT FOR THE THREE I.O.C.
  VALLEYS (DRY LAKE, PINE, WAH-WAH) NONE OF THE FACILITIES WERE
- 5. MAP SYMBOLS SHOWN IN THE EXPLANATION ON THIS SHEET PERTAIN TO THE INFORMATION PLACED ON THESE MAPS FOR THE MX PROGRAM.

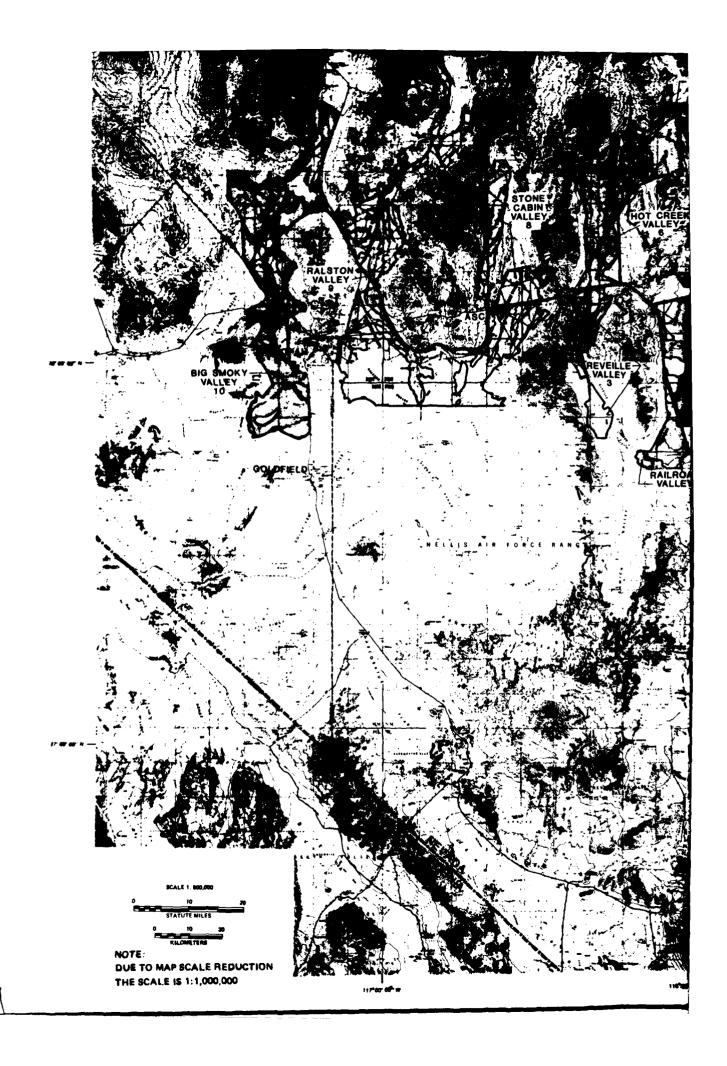
  AN EXPLANATION OF SYMBOLS FOR THE USGS BASE MAPS IS NOT INCLUDED. IT IS ASSUMED THAT THE READER IS FAMILIAR WITH THE STANDARD USGS TOPOGRAPHIC MAPPING SYMBOLS.
- 6. THE DTN ROAD ALIGNMENTS IN THE 1:62,500 MAPS REPRESENT
  THE APPROXIMATE CENTER LINE OF THE PROPOSED DTN RIGHT-OF-WAY.
  WHERE THESE PROPOSED ALIGNMENTS DEPART FROM EXISTING ROADS,
  TANGENT LINE SEGMENTS ARE USED TO INDICATE THE ALIGNMENT.
  THESE TANGENT LINE SEGMENTS HAVE NOT CONSIDERED THE ROAD
  DESIGN RADII OF CURVATURE.
- 7. THE O.B. AND O.B.T.S. BOUNDARIES, SHOWN AT 1:62,500 MAP SCALE REPRESENT A GENERALIZED SITING AREA DELINEATED TO THE NEAREST ONE-QUARTER SECTION. FINALIZATION OF THE SPECIFIC FACILITY LOCATION WILL BE WITHIN THIS AREA AND OCCUPY LESS AREA THAN IS ENCLOSED BY THE CURRENT DEPICTION.
- 8. THE MATERIAL SITES BOUNDARIES SHOWN at 1:62,500 REPRESENT
  GENERALIZED AREAS DELINEATED TO THE NEAREST ONE-QUARTER
  SECTION. FINALIZATION OF THE SPECIFICS REGARDING CONSTRUCTION
  WILL DICTATE WHETHER THE IDENTIFIED MATERIAL SITES ARE ACTUALLY
  USED AND TO WHAT EXTENT THEY ARE TO BE USED.

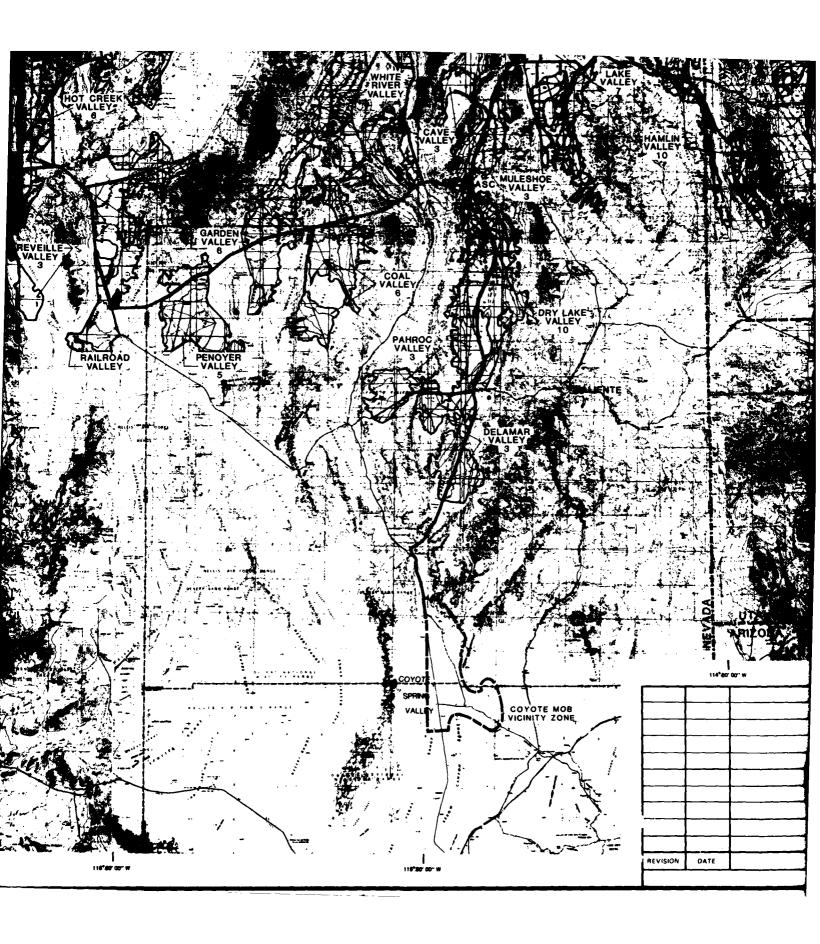
|          | DESTOCATED TRANSPORTATION NETWORK (DANS)                            |
|----------|---|
| <b>-</b> | CLUSTER MAINTENANCE FACILITY (CMF)                                  |
| •        | HORIZONTAL SHELTER SITES (HSS)                                      |
| 1        | BARRIER   |
| 1        | CLUSTER NUMBER  |
|          | TOWNSHIP FIDUCIAL MARKS (SEE EXPLANATORY NOTE #2)                   |
| м        | AIN OPERATING BASE LAYOUTS  |
|          | ACCESS ROAD OR TEMPORARY CONSTRUCTION ROAD                          |
| _        | WATER PIPELINE  |
|          | MX POWERLINES   |
| -0-      | PROPOSED INTERMOUNTAIN POWER PROJECT (IPP) POWERLINES               |
| 0        | RELOCATION OF PROPOSED INTERMOUNTAIN POWER PROJECT (IPP) POWERLINES |
| *******  | RAILROAD SPUR OR SIDING   |
|          | BORROW PIT  |
|          | QUARRIES  |
|          | WATER FIELD   |
|          |   |
|          |   |
|          |   |

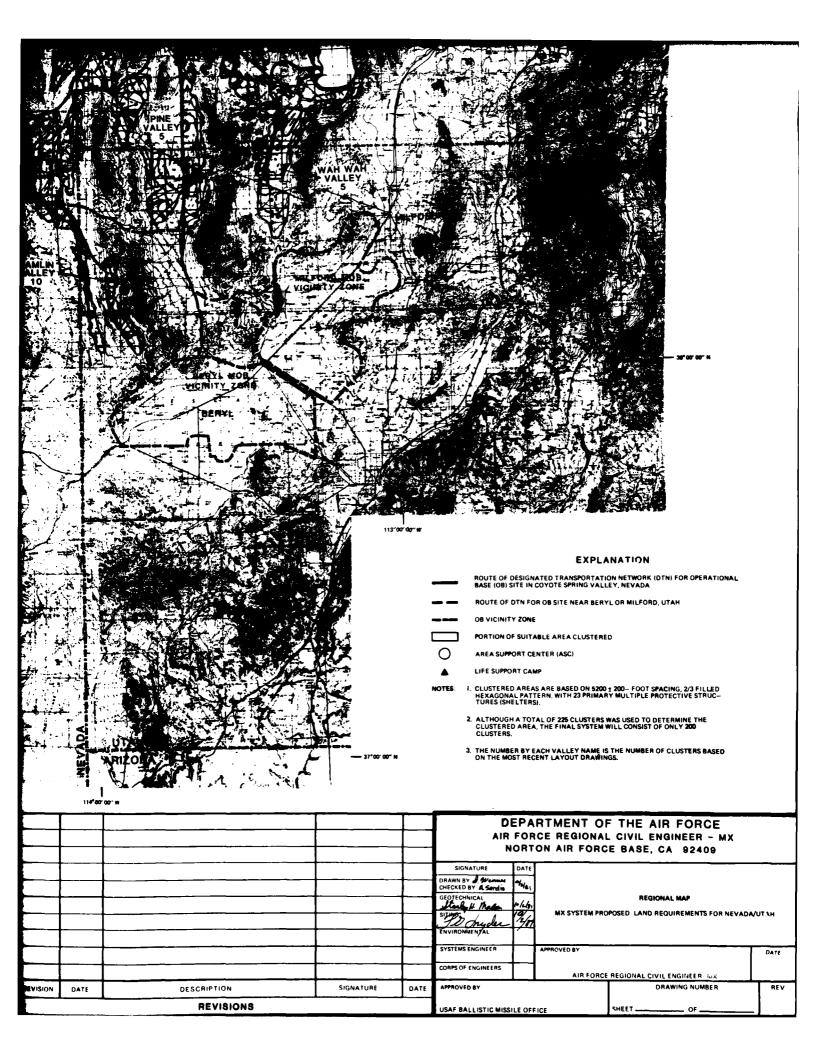
|          |           |             |           |      | DEPARTMENT OF THE AIR FORCE<br>AIR FORCE REGIONAL CIVIL ENGINEER - MX<br>NORTON AIR FORCE BASE, CA 92409 |         |   |          |     |  |  |
|----------|-----------|-------------|-----------|------|--|---------|---|----------|-----|--|--|
|          |           |             |           | 1    | SIGNATURE  | DATE    |   |          |     |  |  |
|          |           | <u> </u>    |           | ├──  | DRAWN BY & America   | 10/2/gt |   |          |     |  |  |
|          |           |             |           |      |  | to/a/gi | EXPLANATION SHEET  MX SYSTEM PROPOSED LAND REQUIREMENTS FOR NEVADA/UTAH |          |     |  |  |
|          | *****     |             |           |      | For Anyles   | 1/2/11  |   |          |     |  |  |
|          |           |             |           | Γ    | ENVIRONMENTAL  |         |   |          |     |  |  |
|          |           |             |           |      | SYSTEMS ENGINEER   |         | APPROVED BY   |          |     |  |  |
|          |           |             |           |      | CORPS OF ENGINEERS   |         | AIR FORCE REGIONAL CIVIL ENGINEER-inx                                   |          |     |  |  |
| REVISION | DATE      | DESCRIPTION | SIGNATURE | DATE |  |         |   | REV      |     |  |  |
|          | REVISIONS |             |           |      | USAF BALLISTIC MISS  | LE OF   | FICE  | SHEET OF | . [ |  |  |

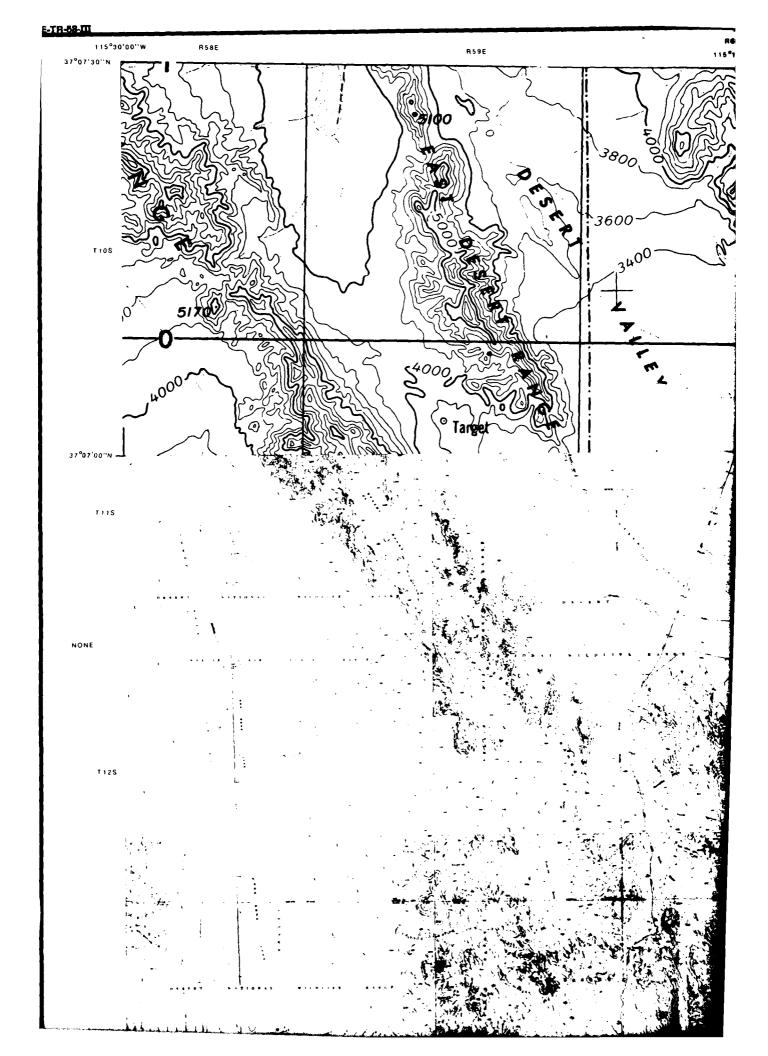




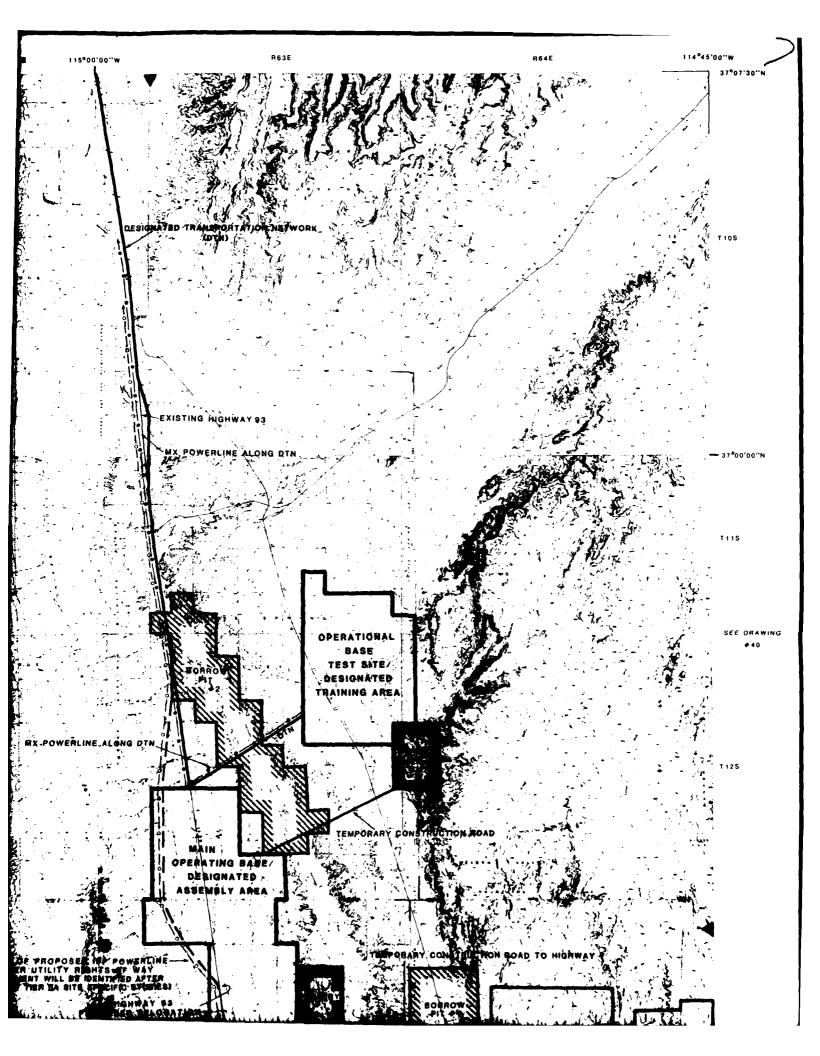


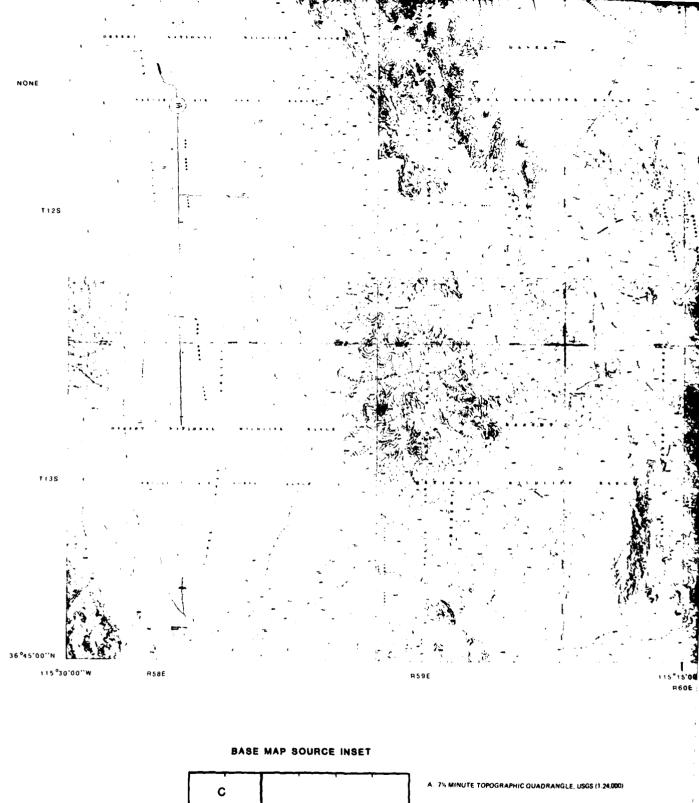


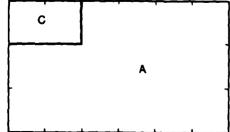




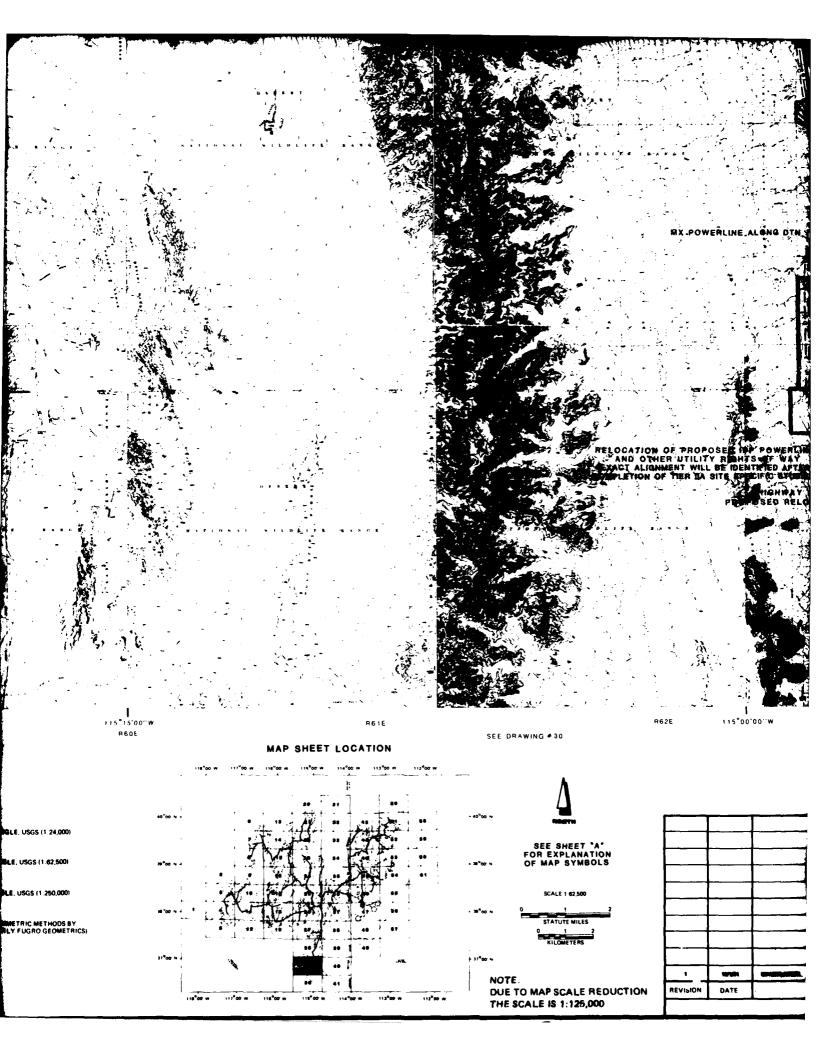


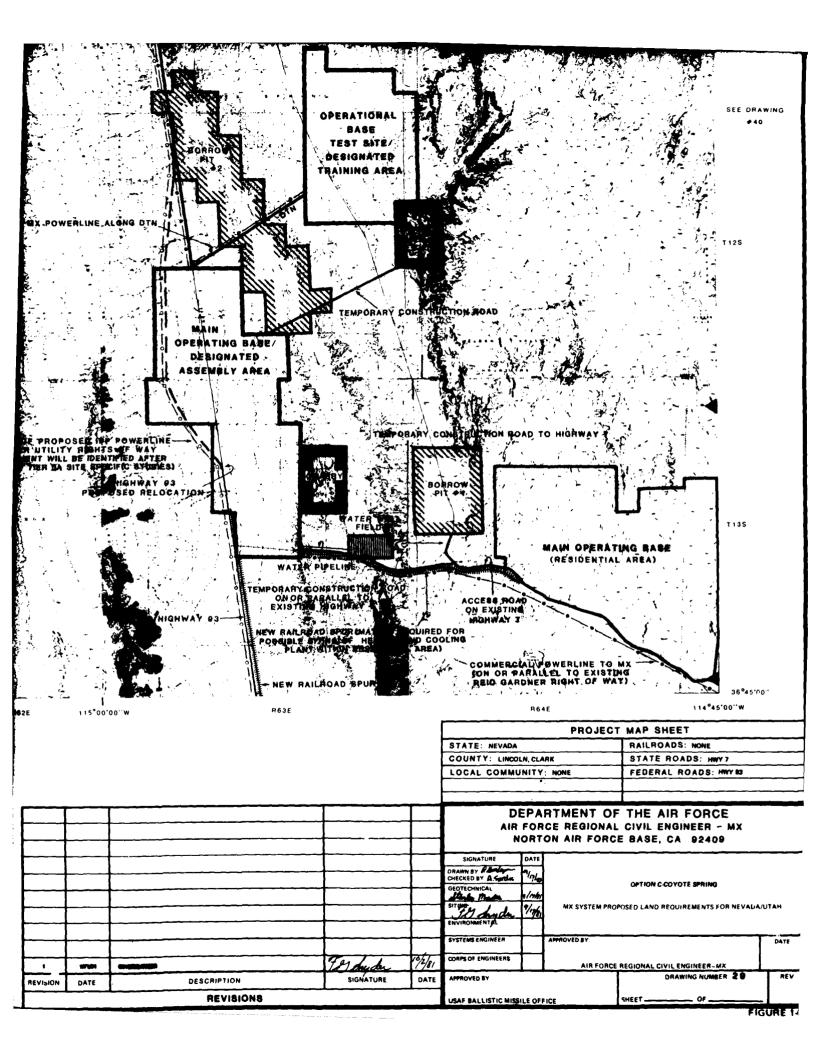


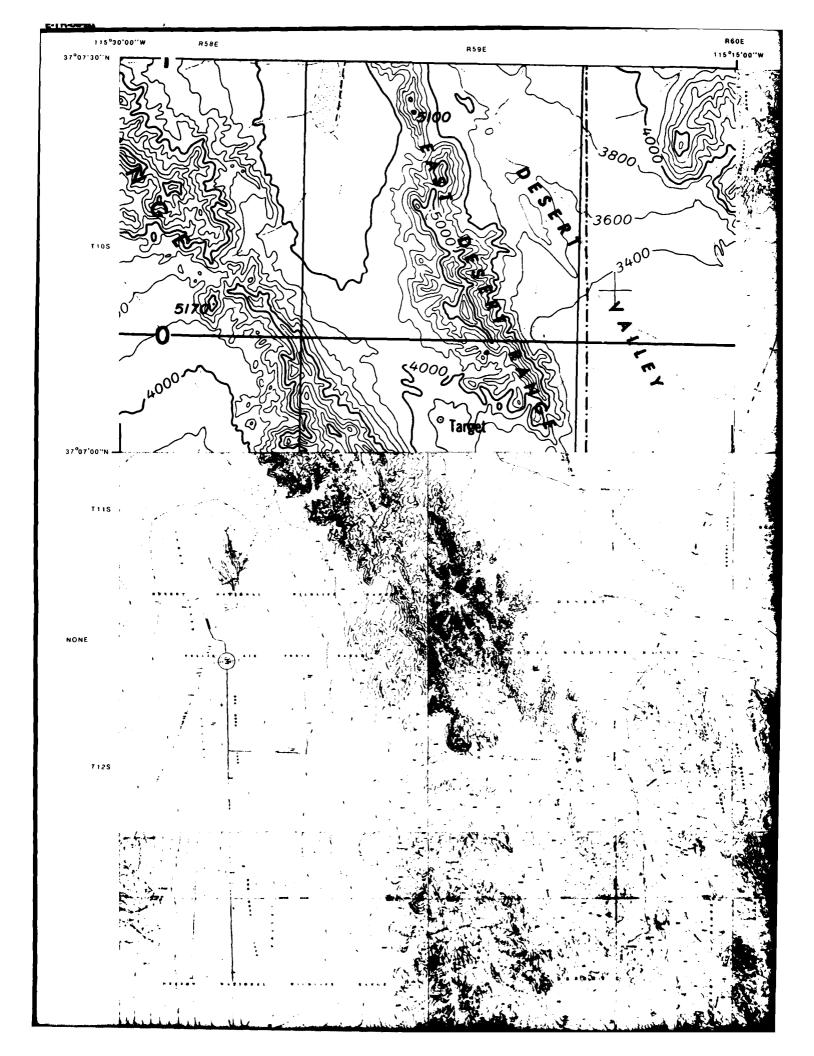


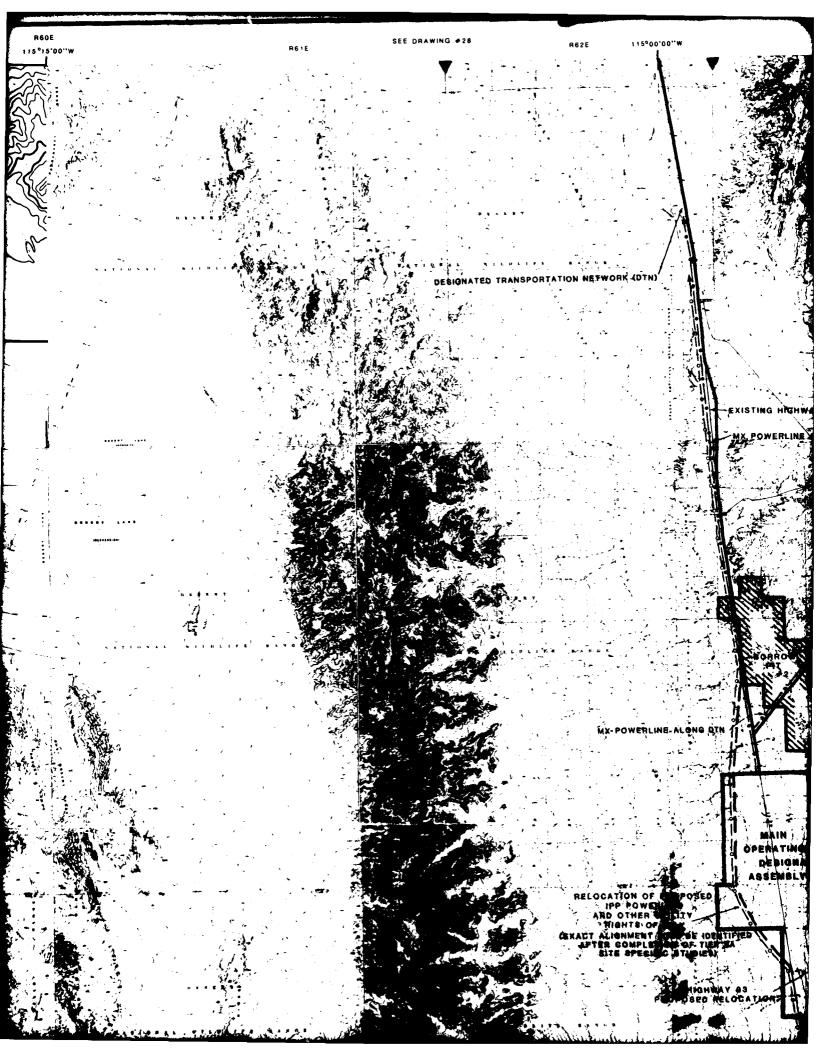


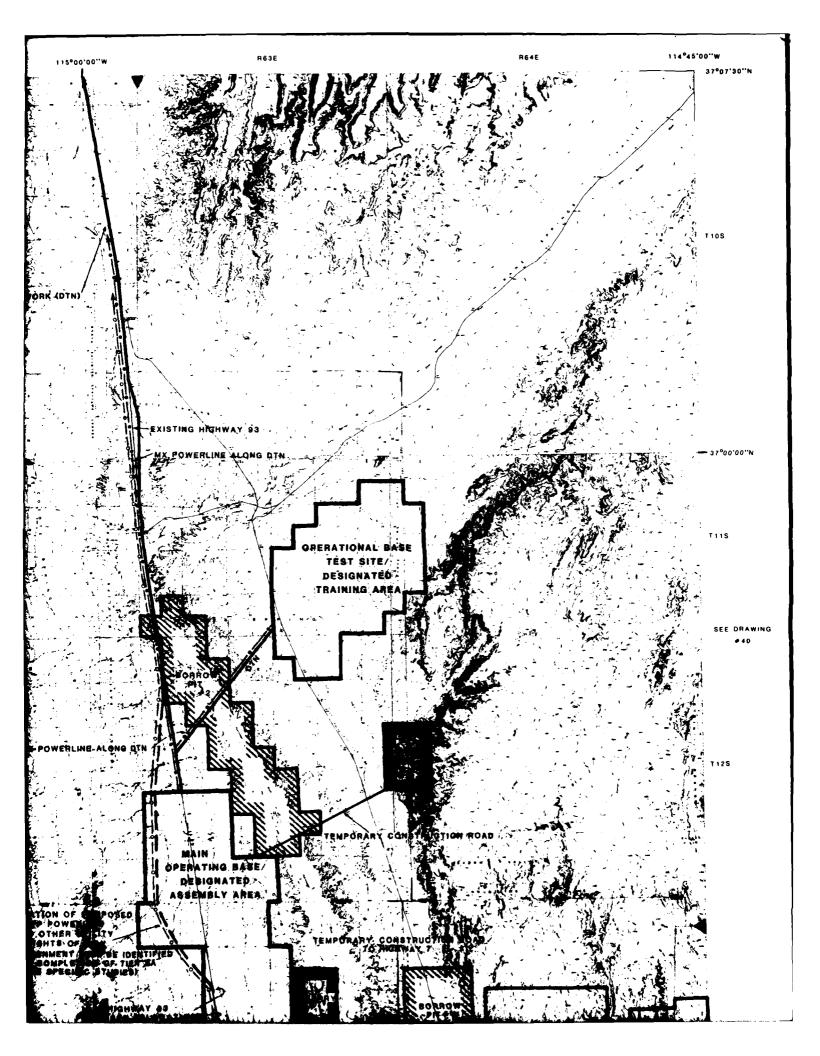
- B. 15 MINUTE TOPOGRAPHIC QUADRANGLE, USGS (1:82,500)
- C. 2 DEGREE TOPOGRAPHIC QUADRANGLE, USGS (1:280,000)
- D. COMPILED BY STEREO PHOTOGRAMMETRIC METHODS BY ERTEC AIRBORNE SYSTEMS (FORMERLY FUGRO GEOMETRICS) AT 1:82,500

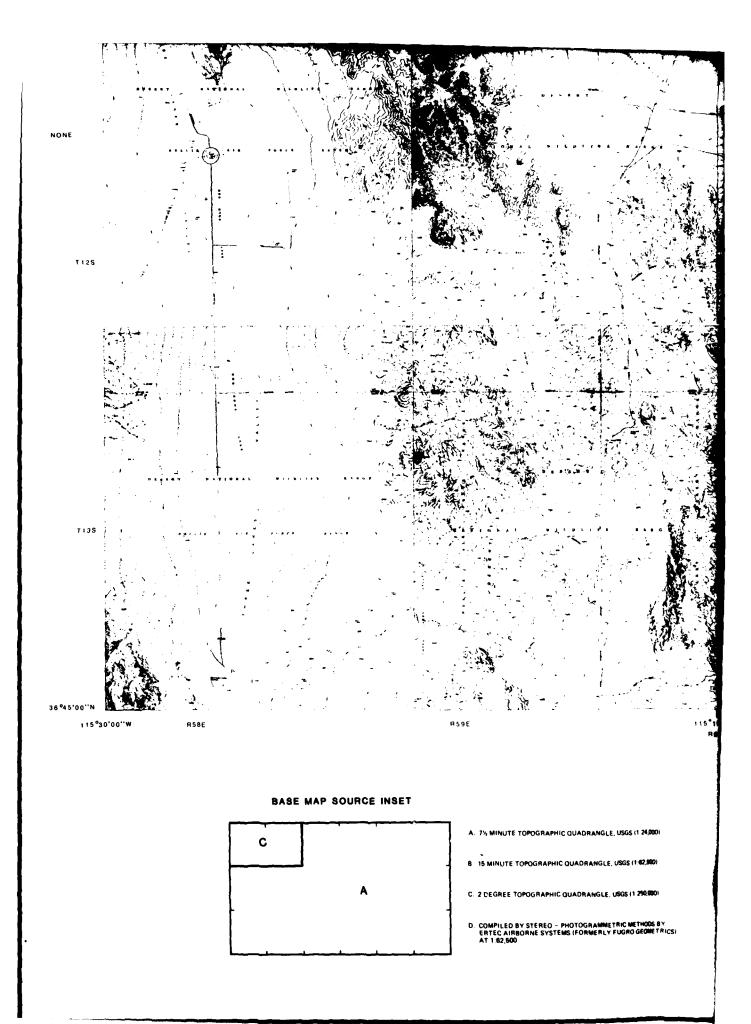


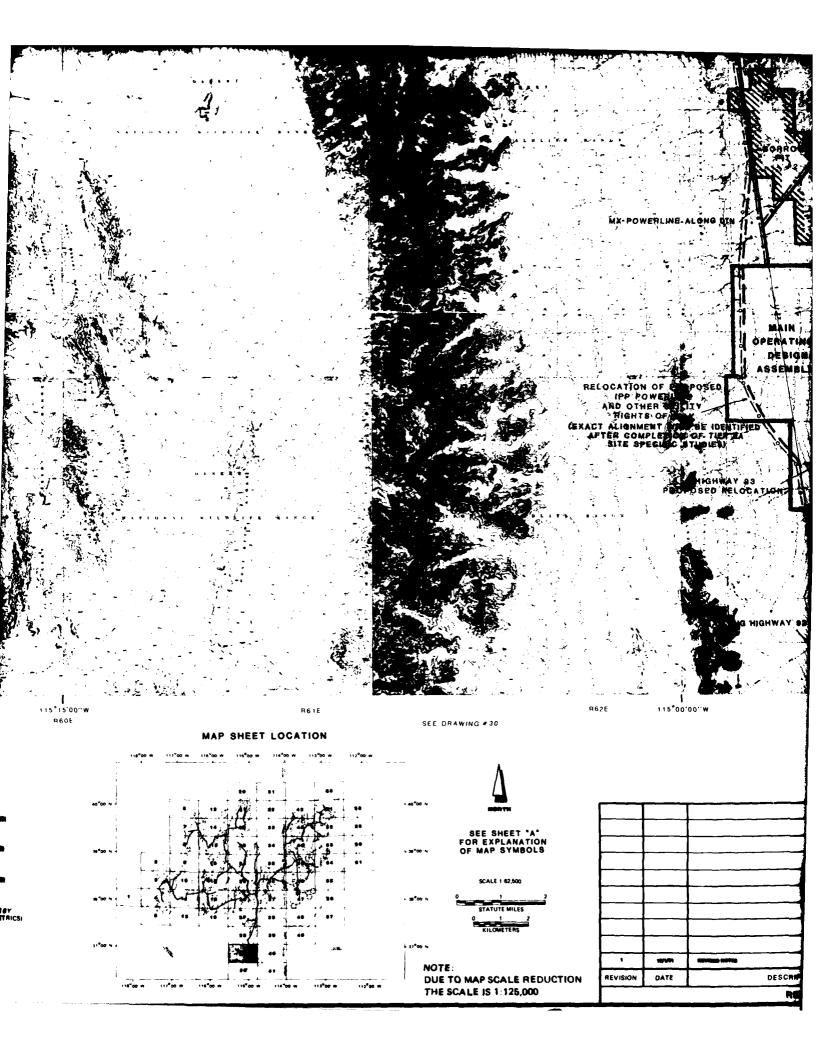


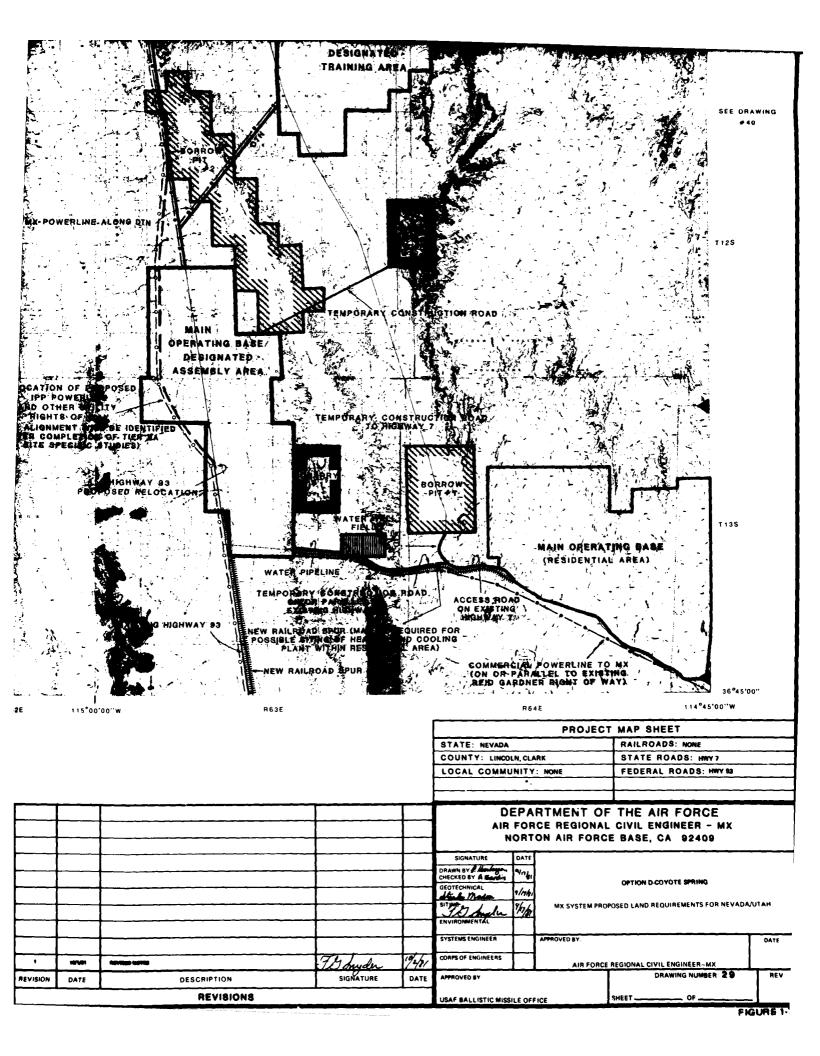


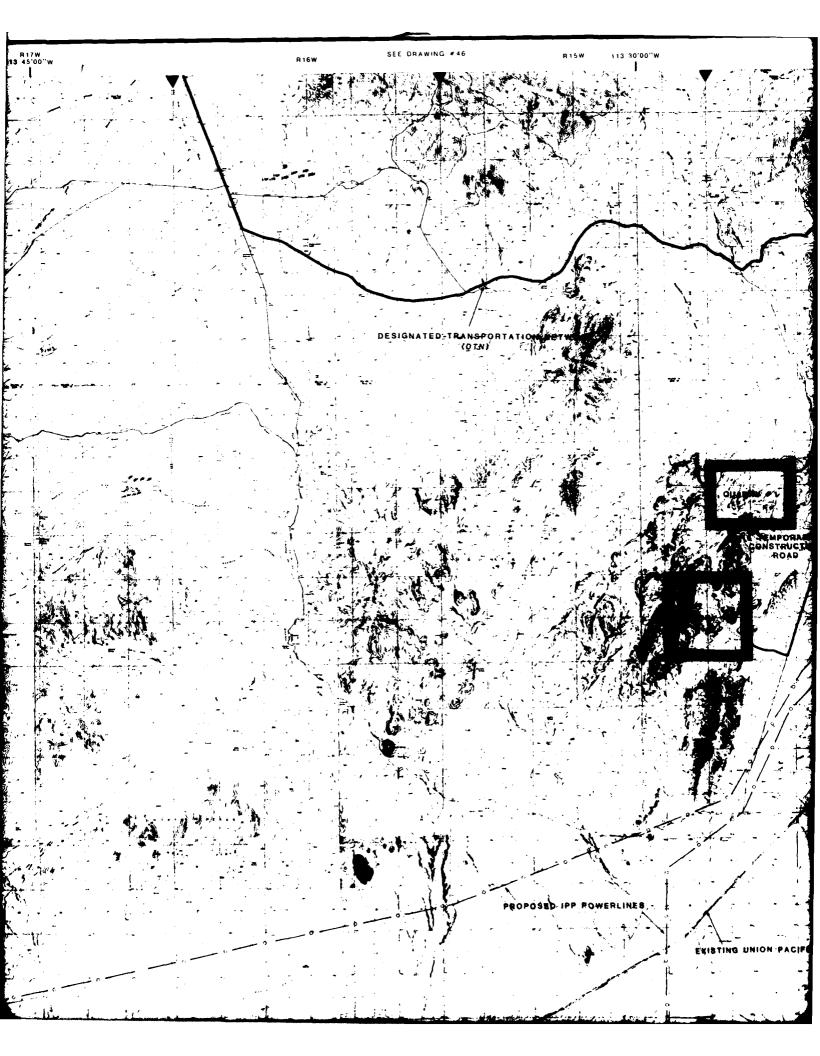


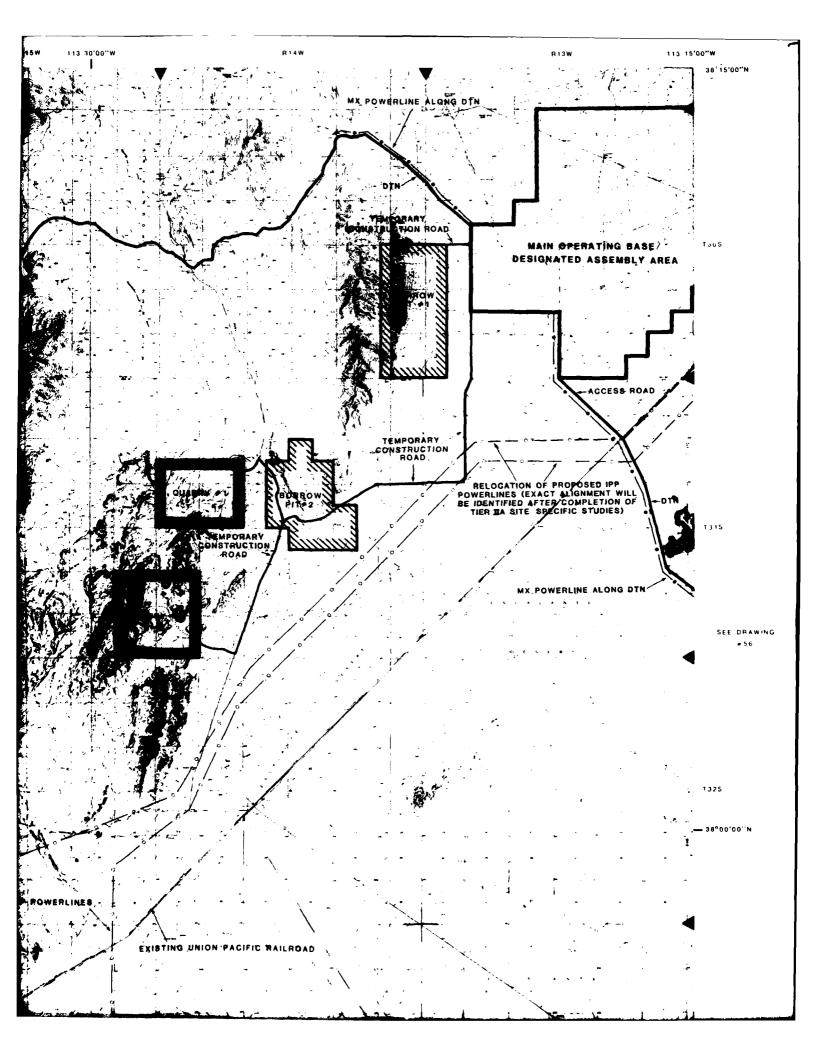


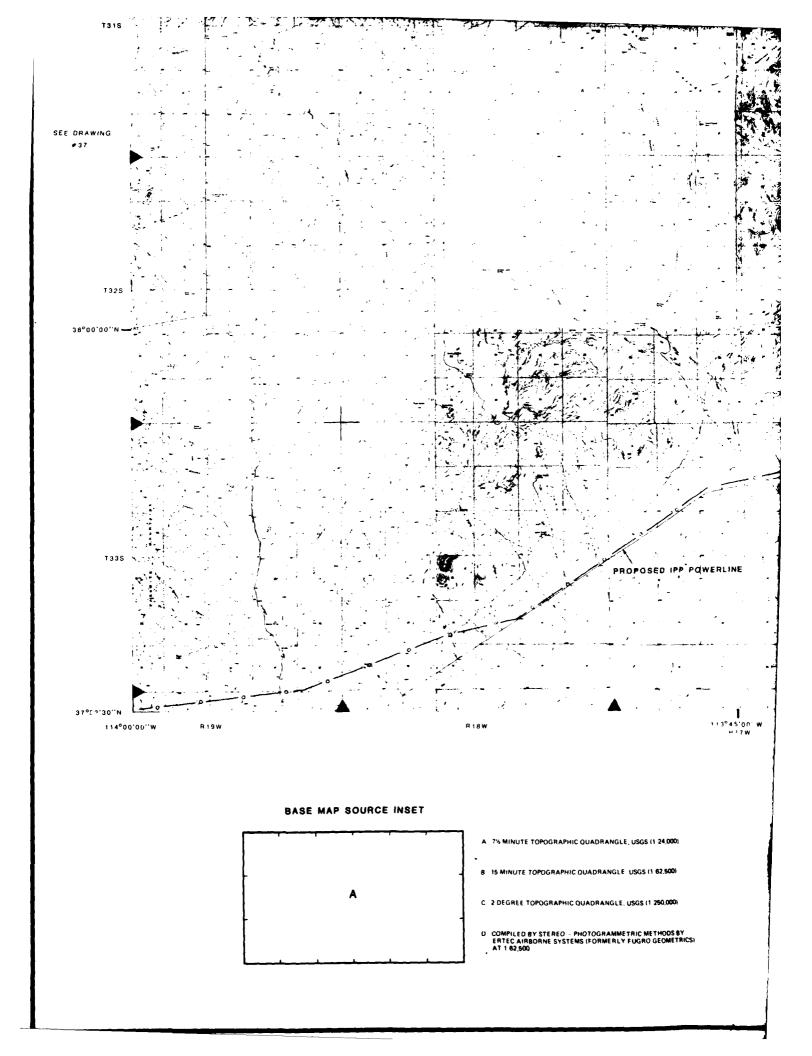


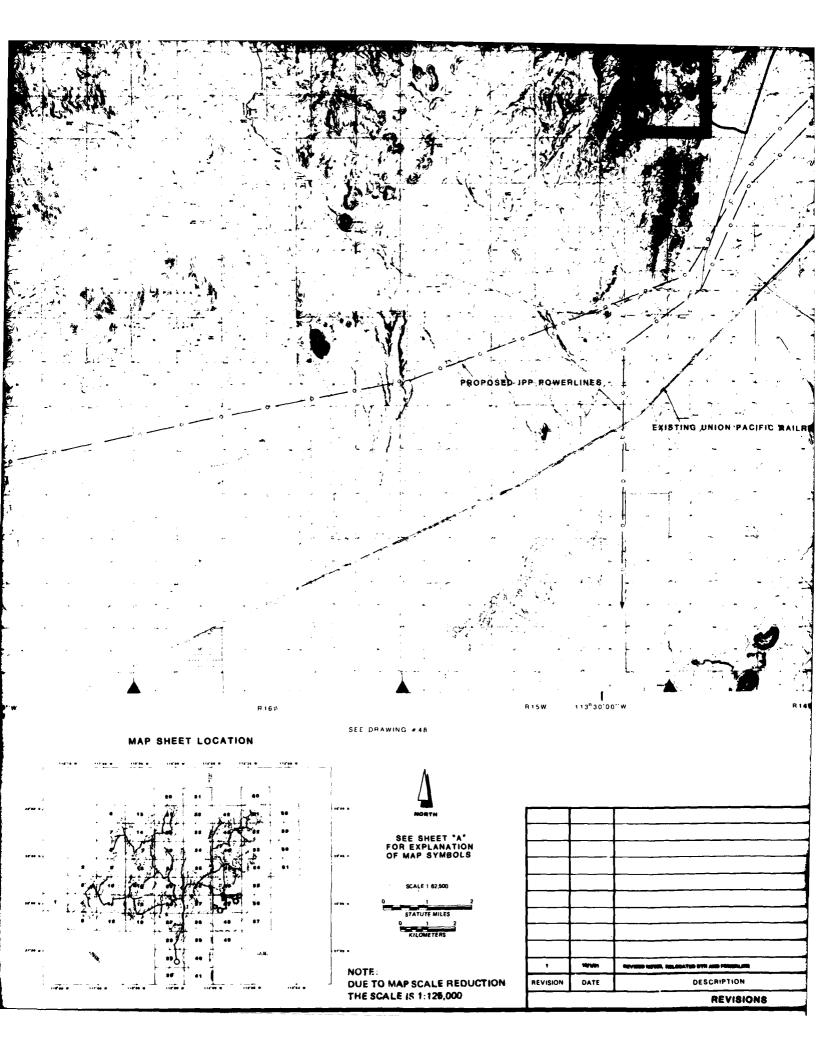


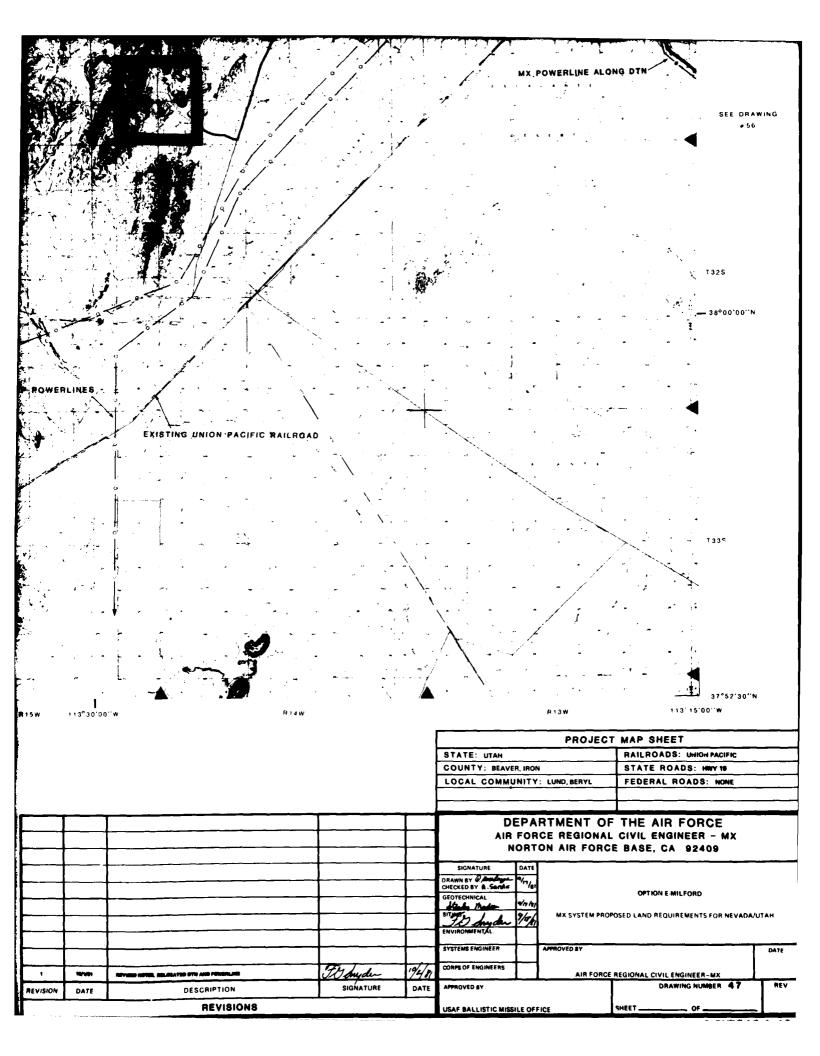


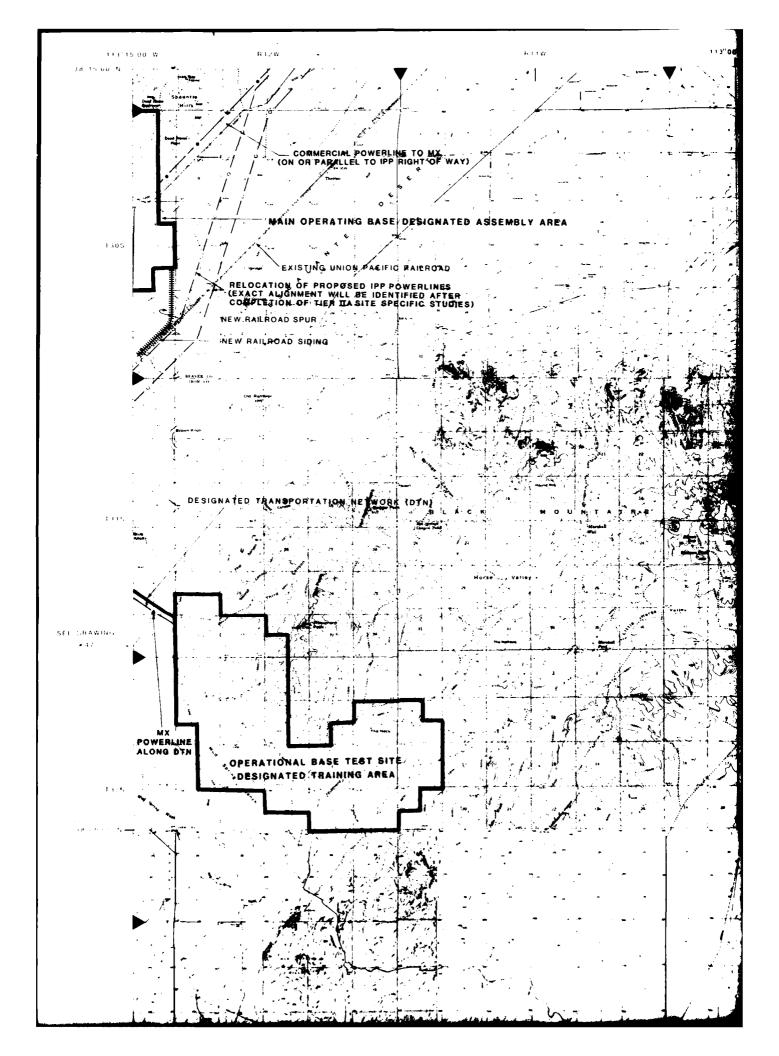


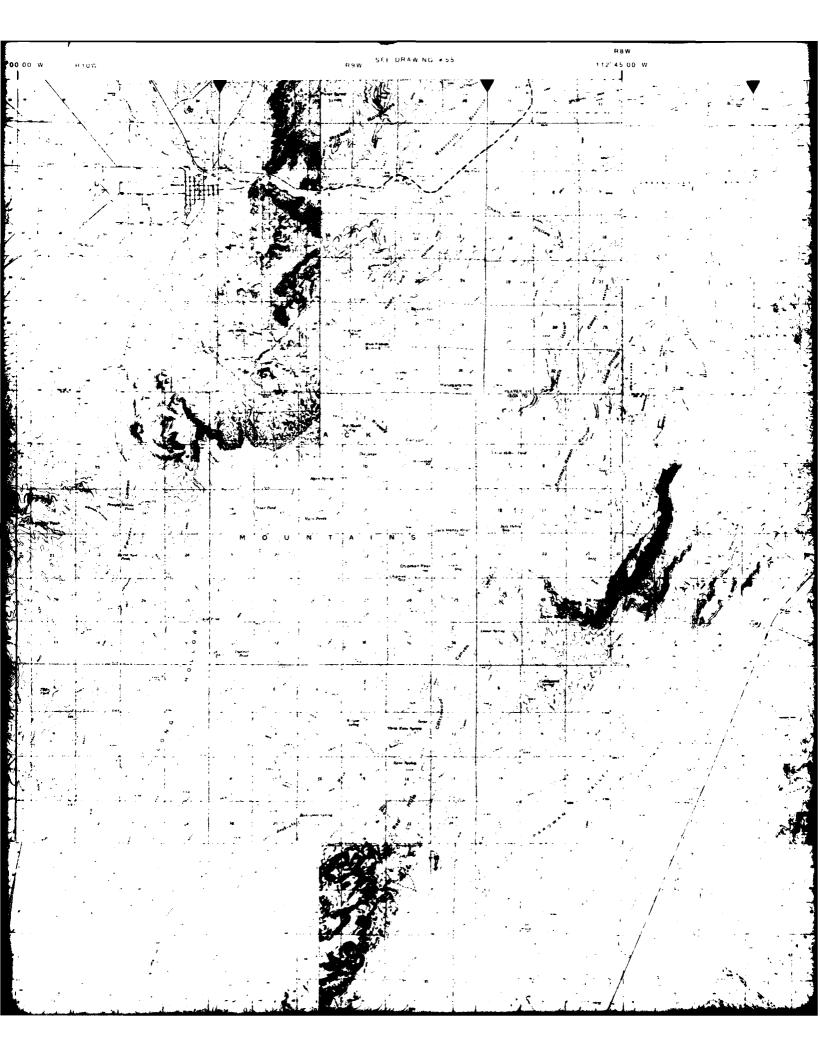


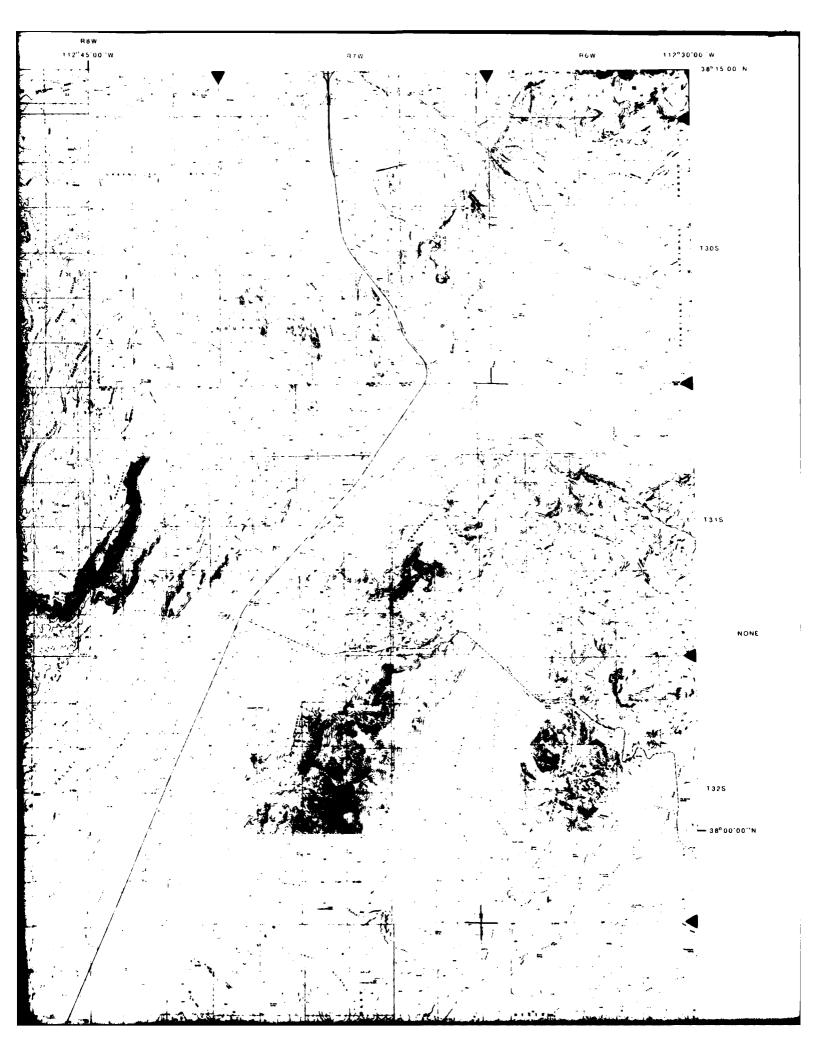


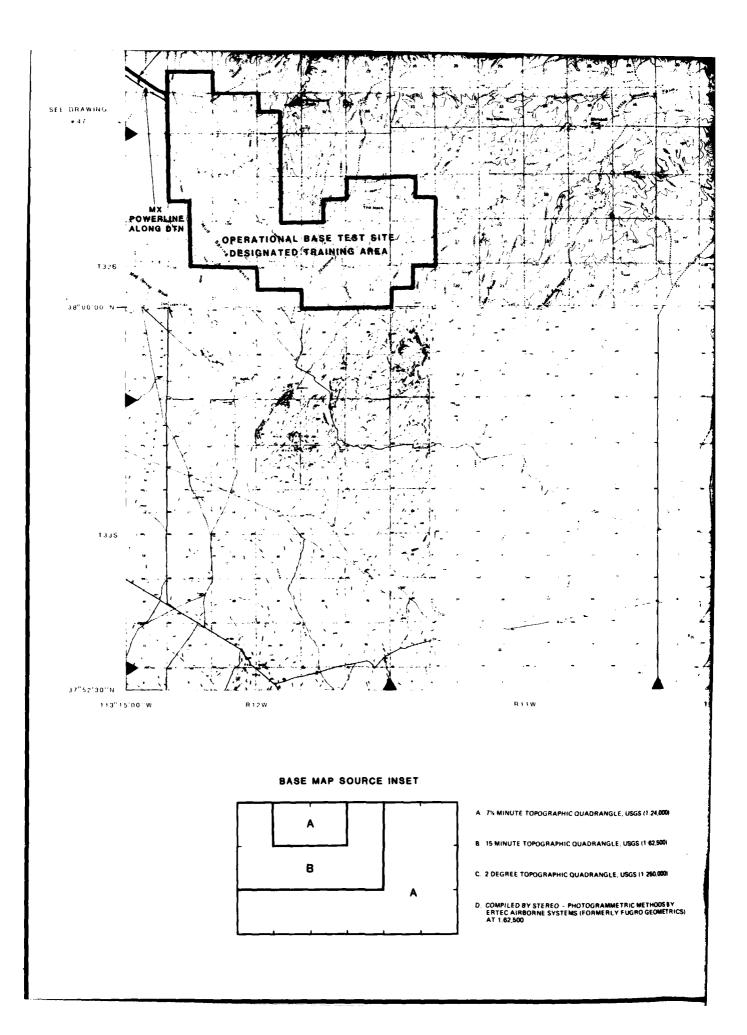


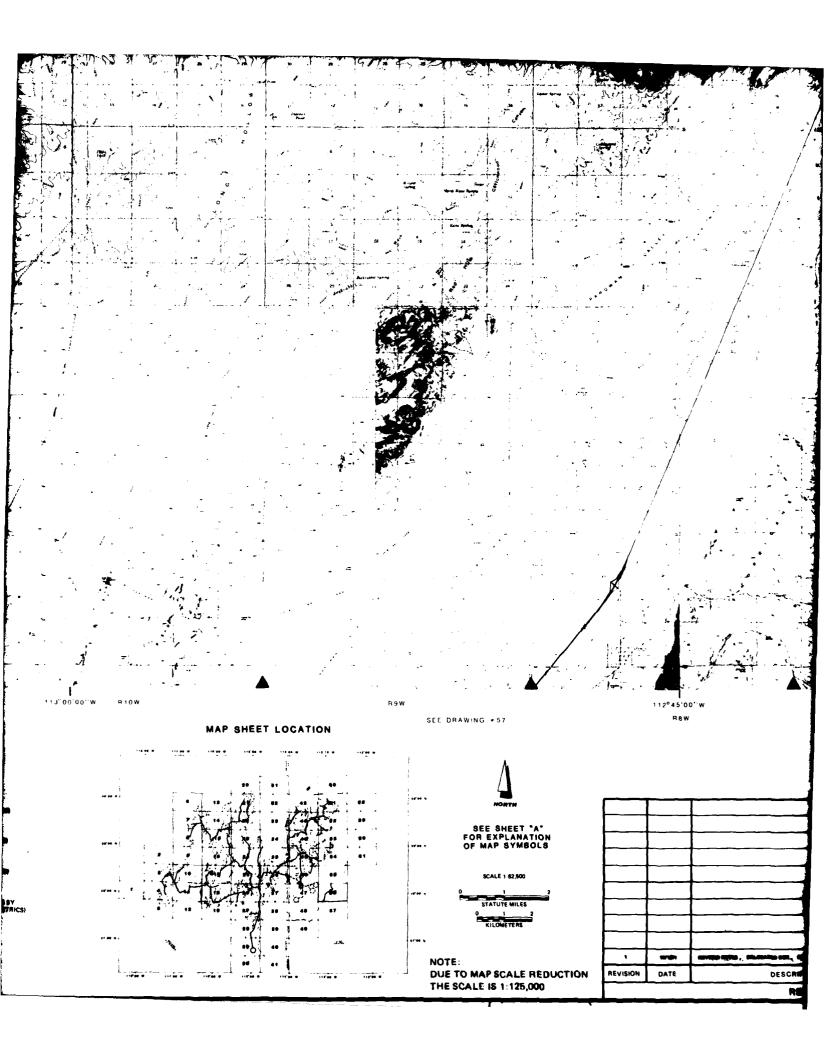


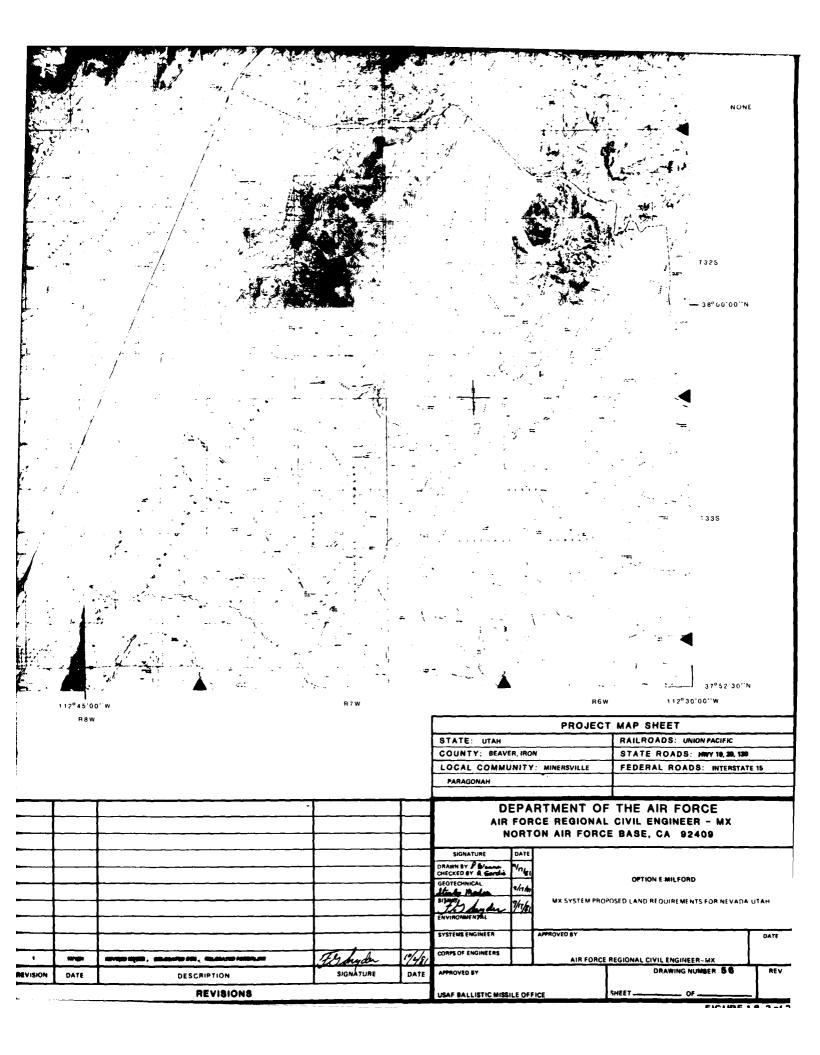


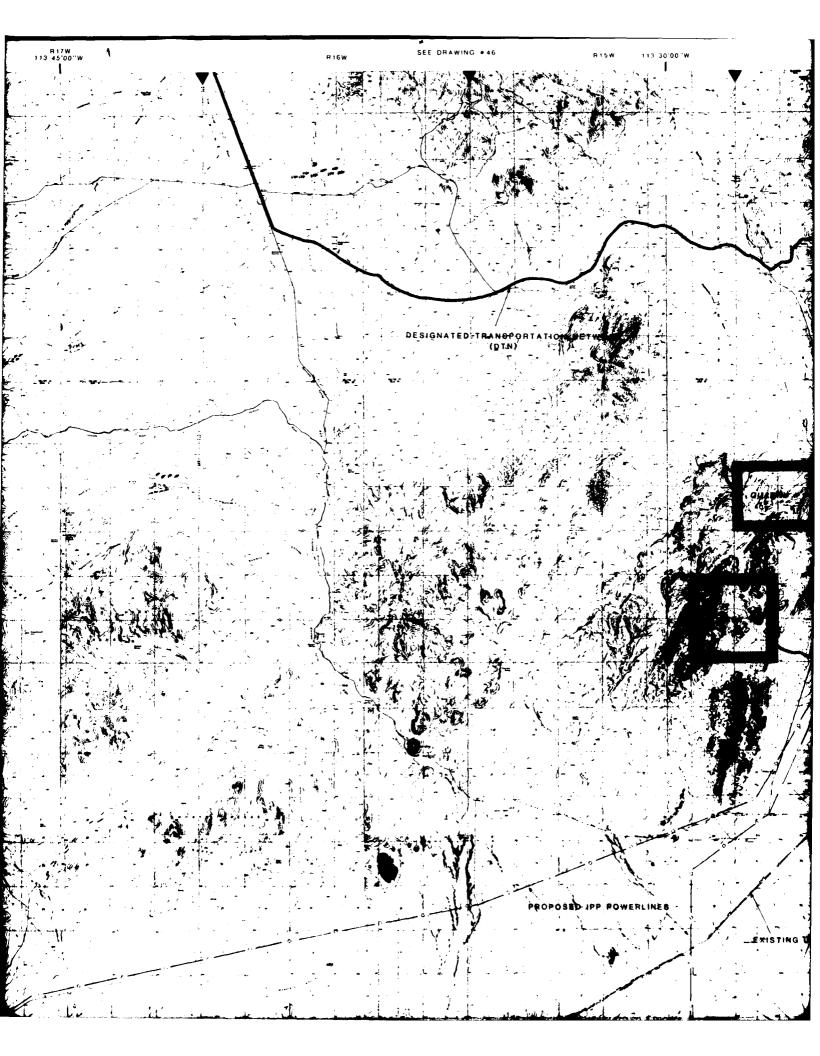


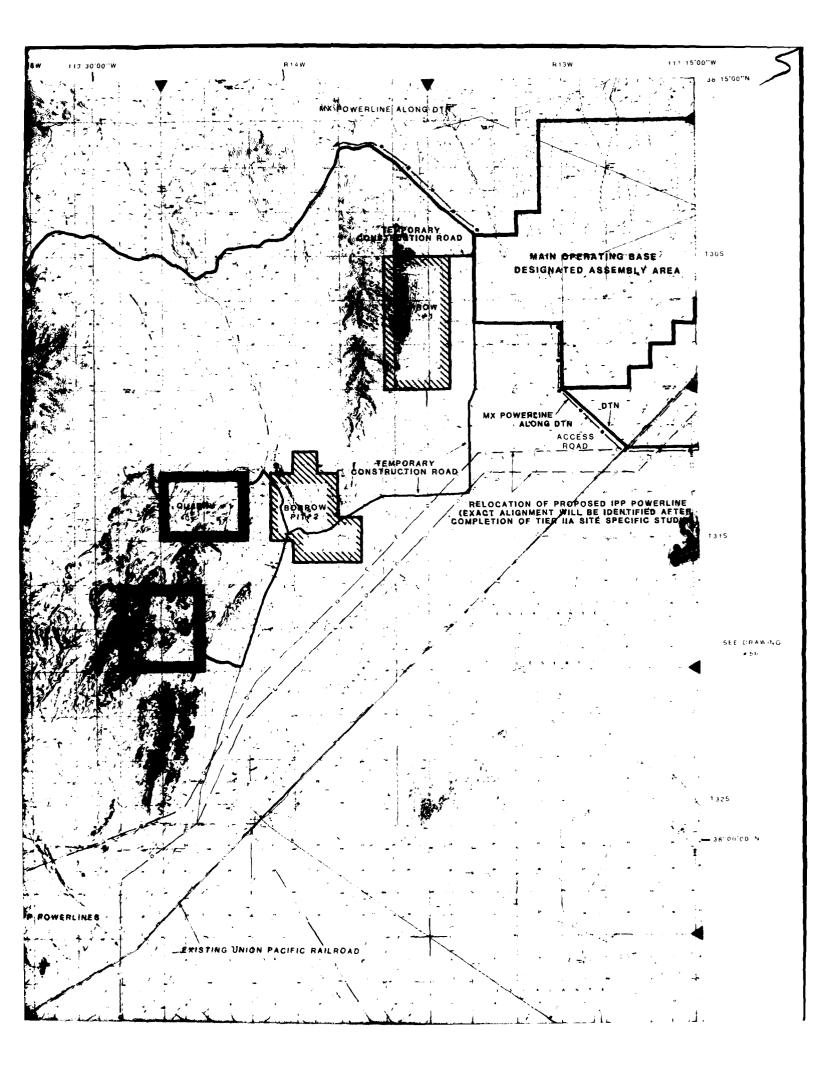


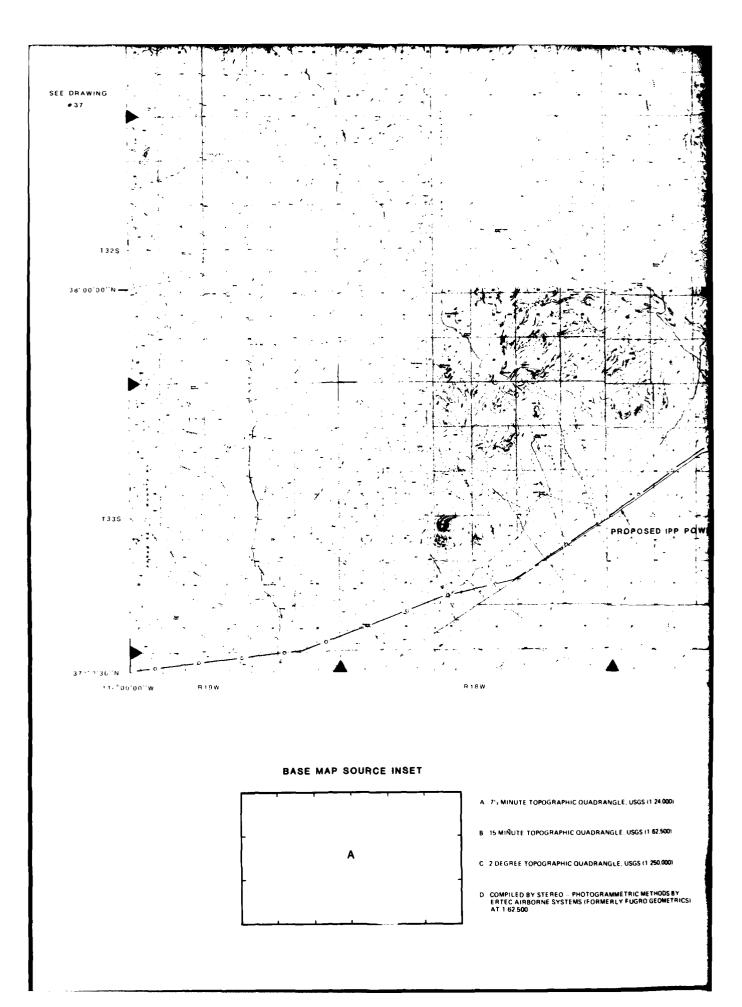


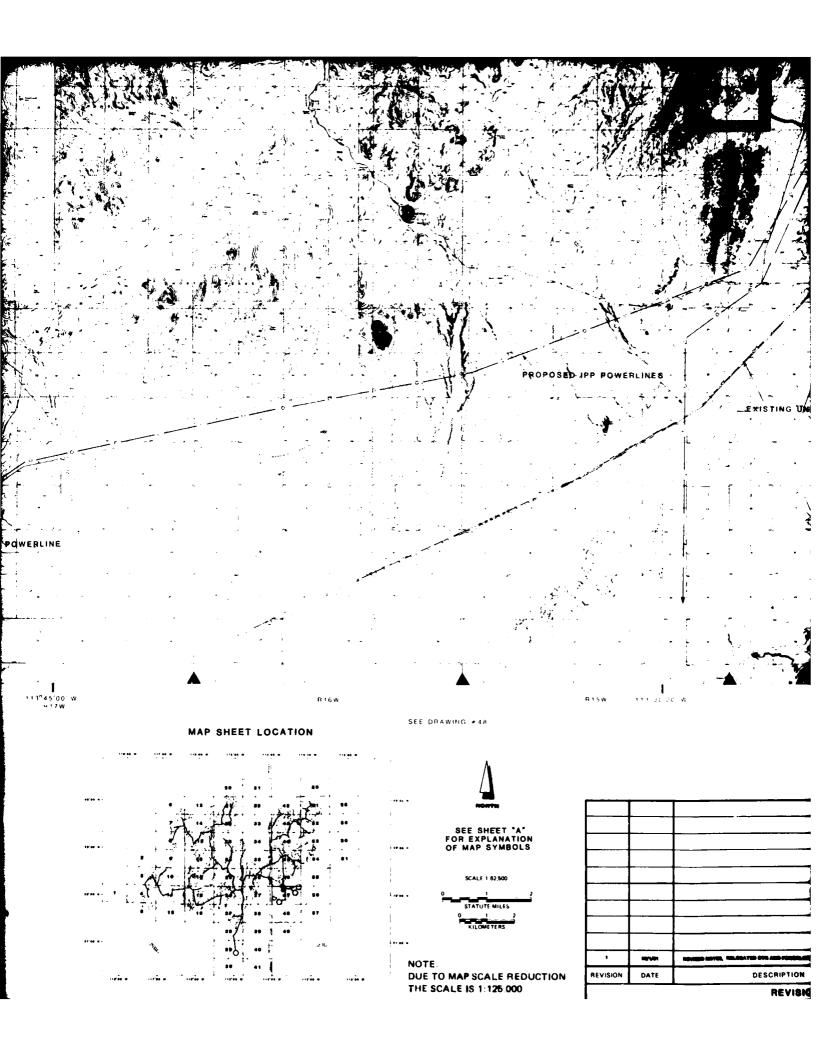


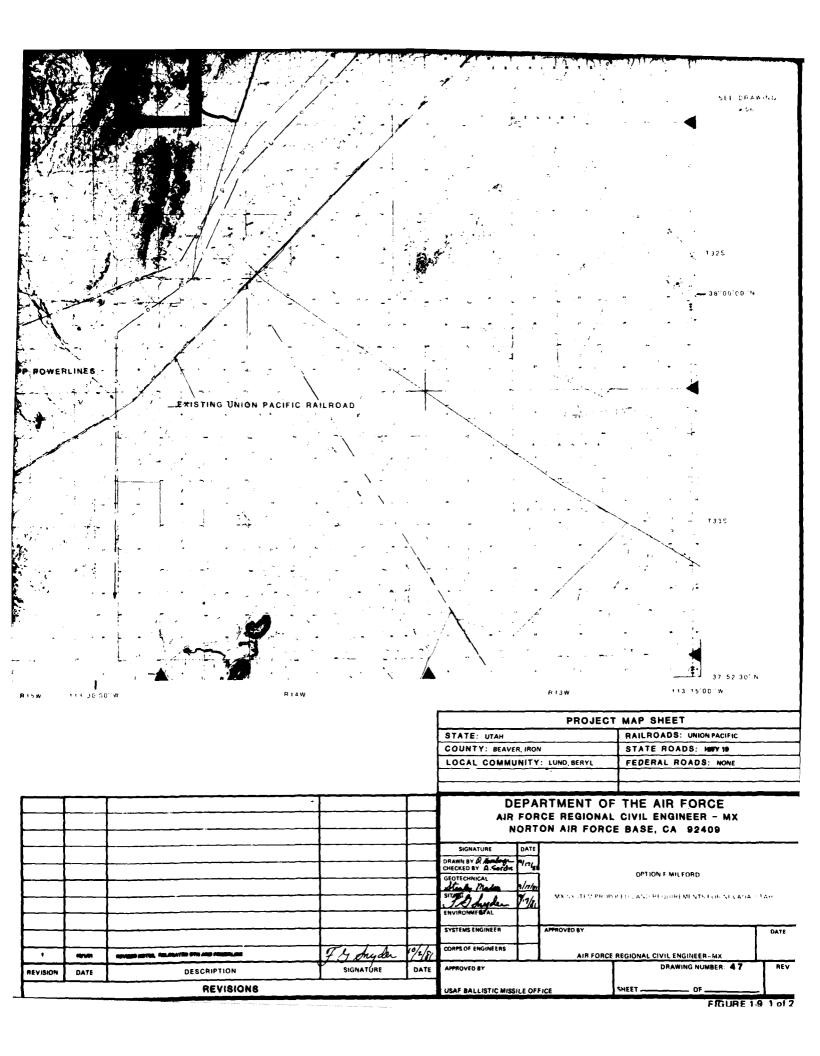


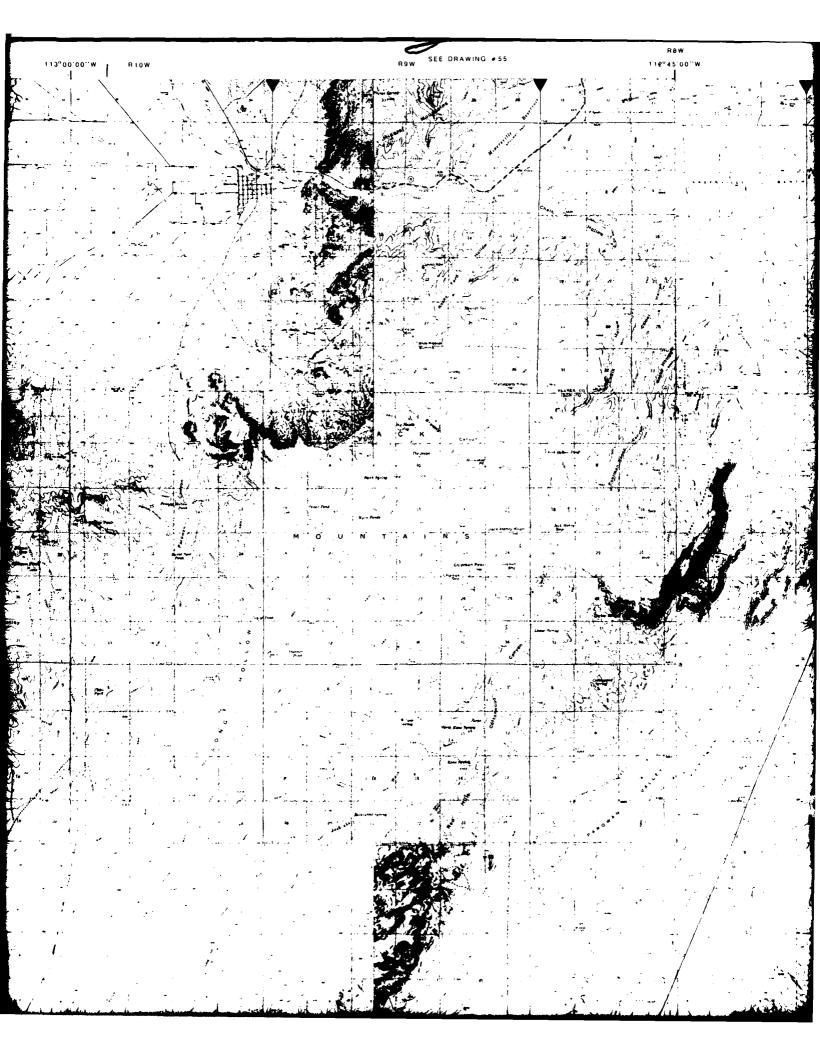


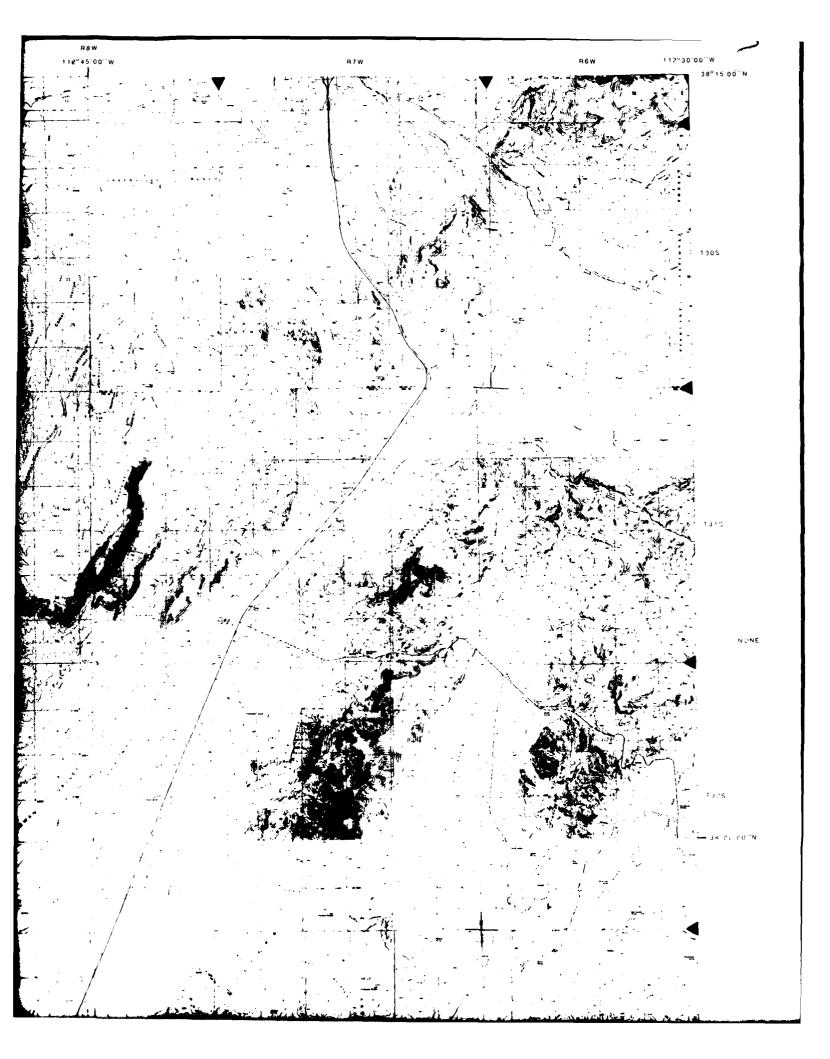


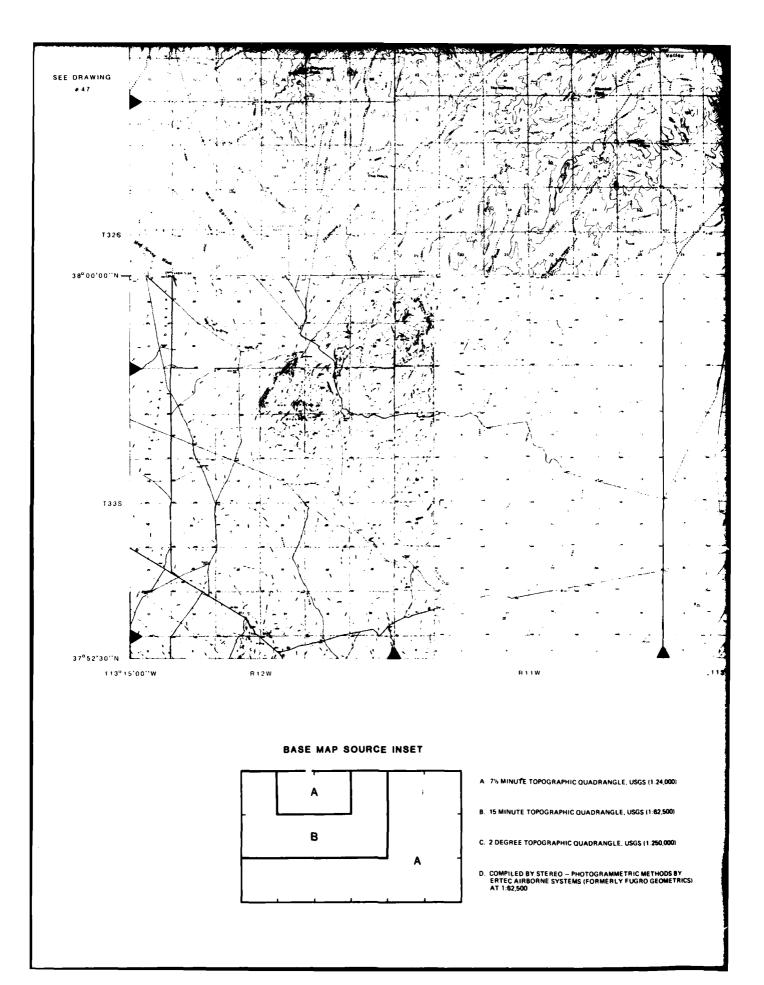


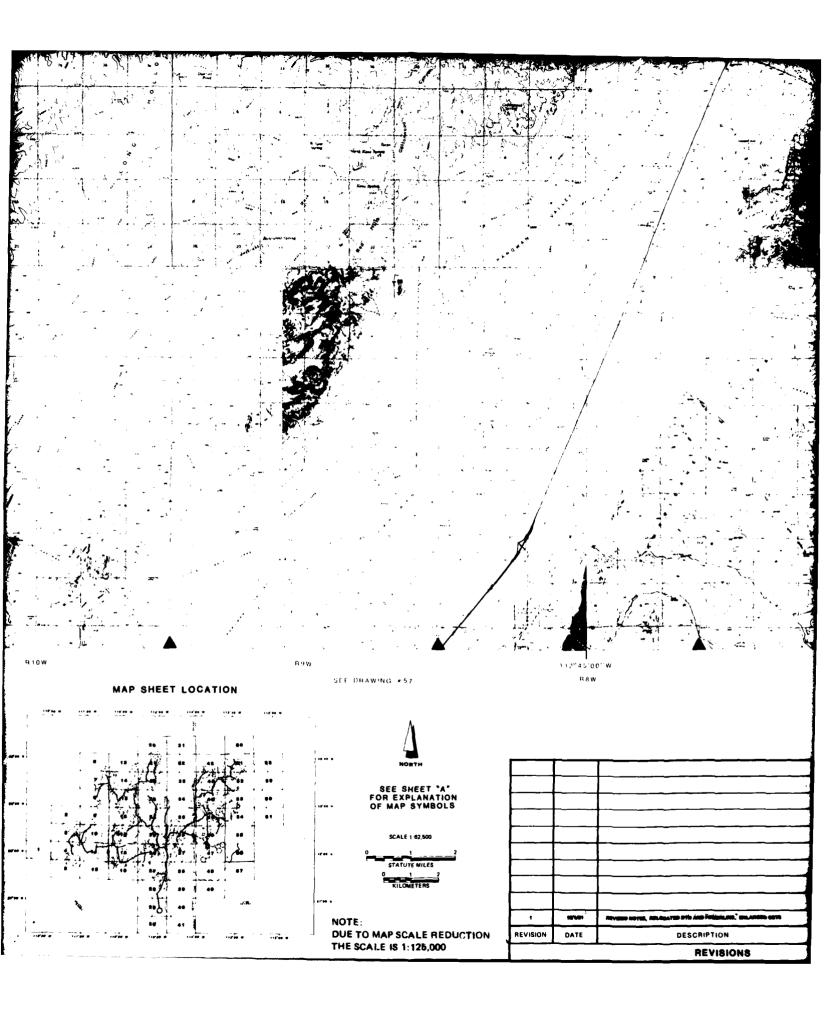


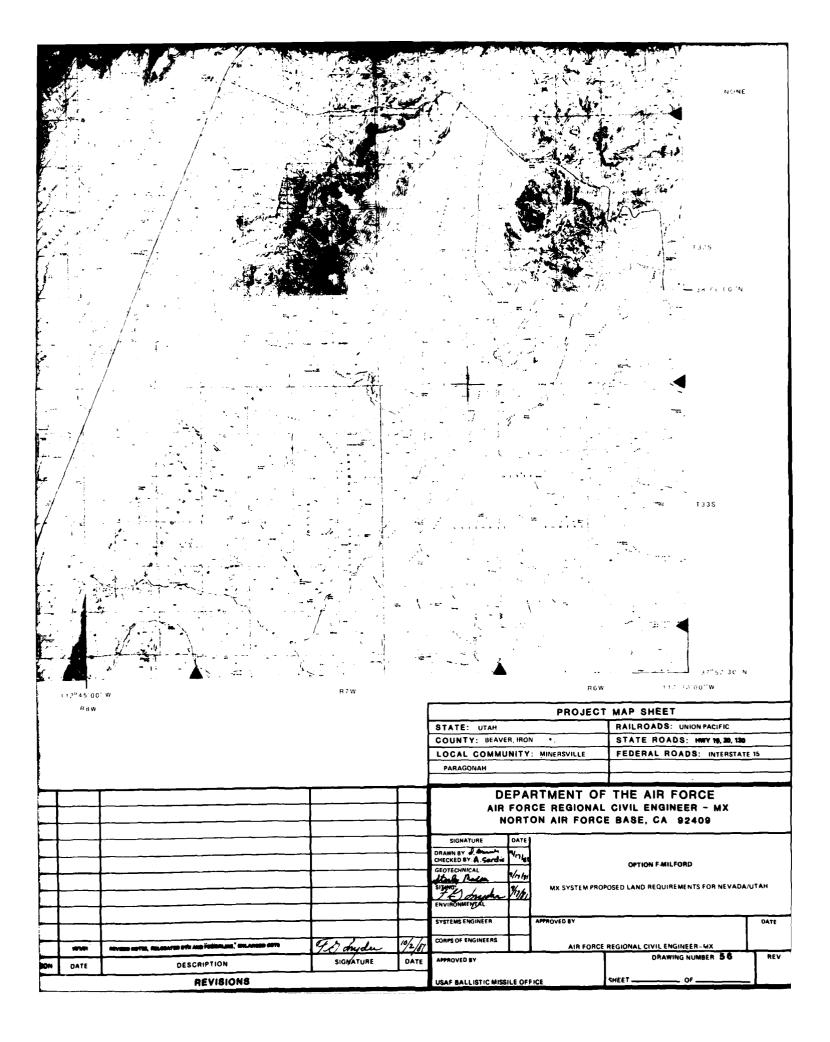


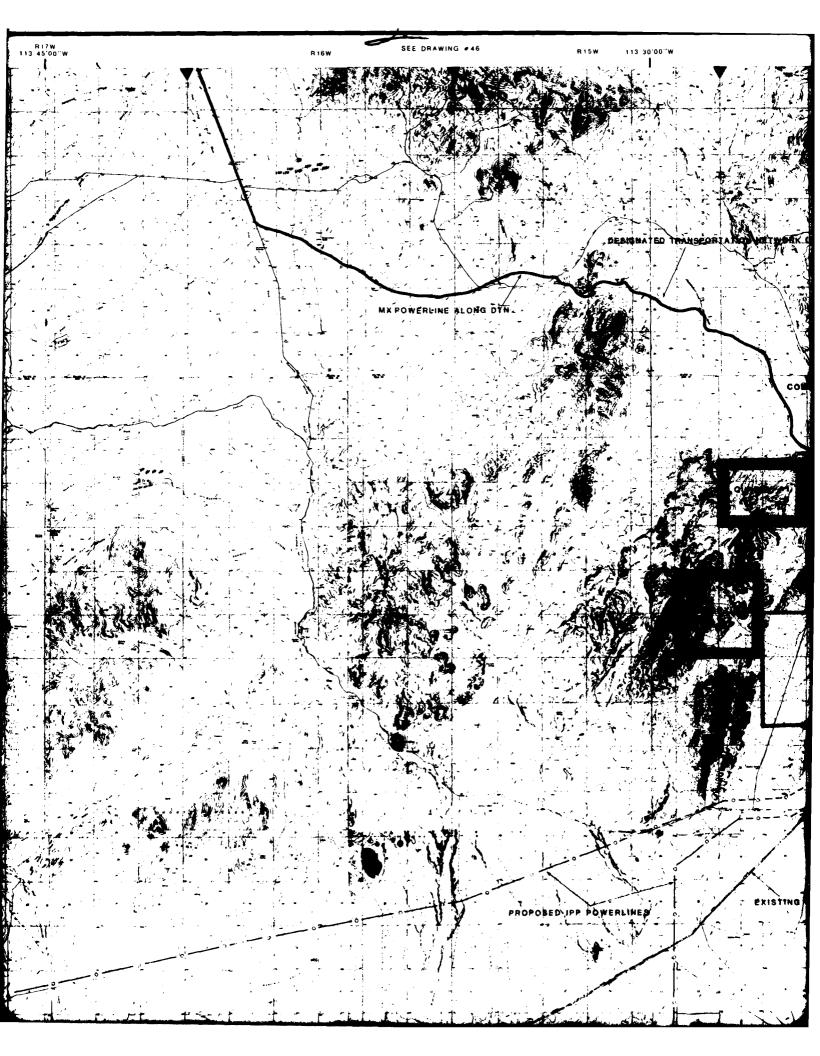


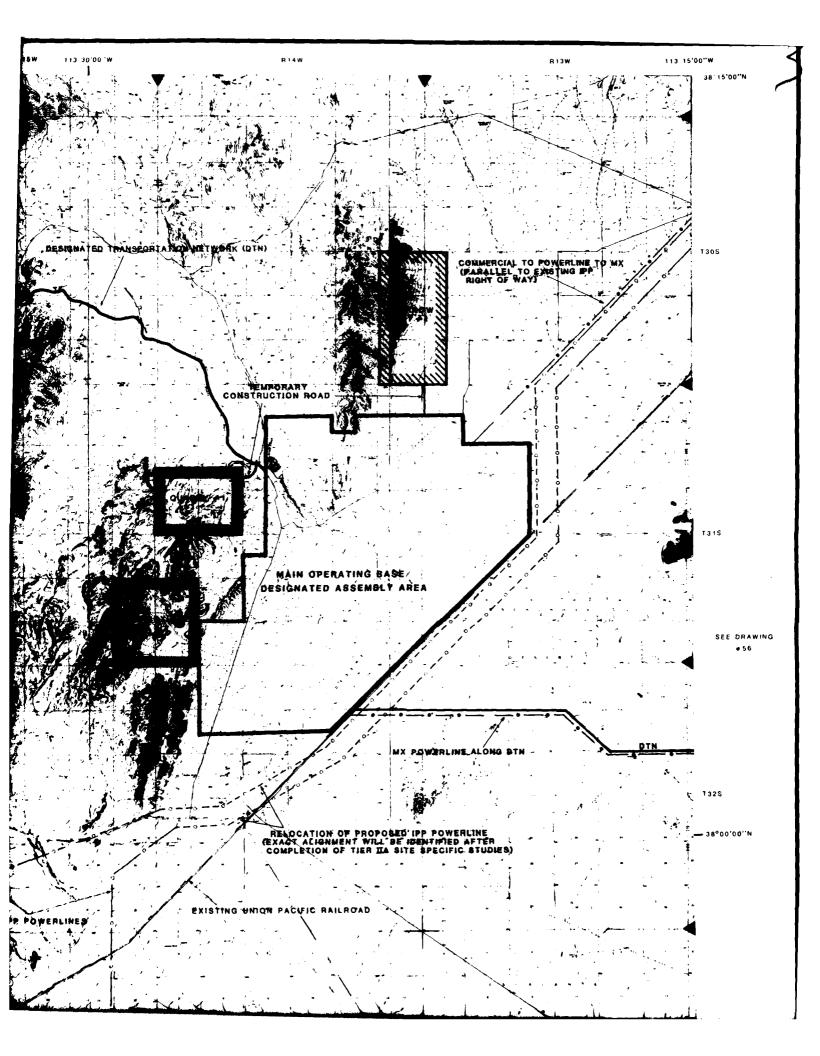


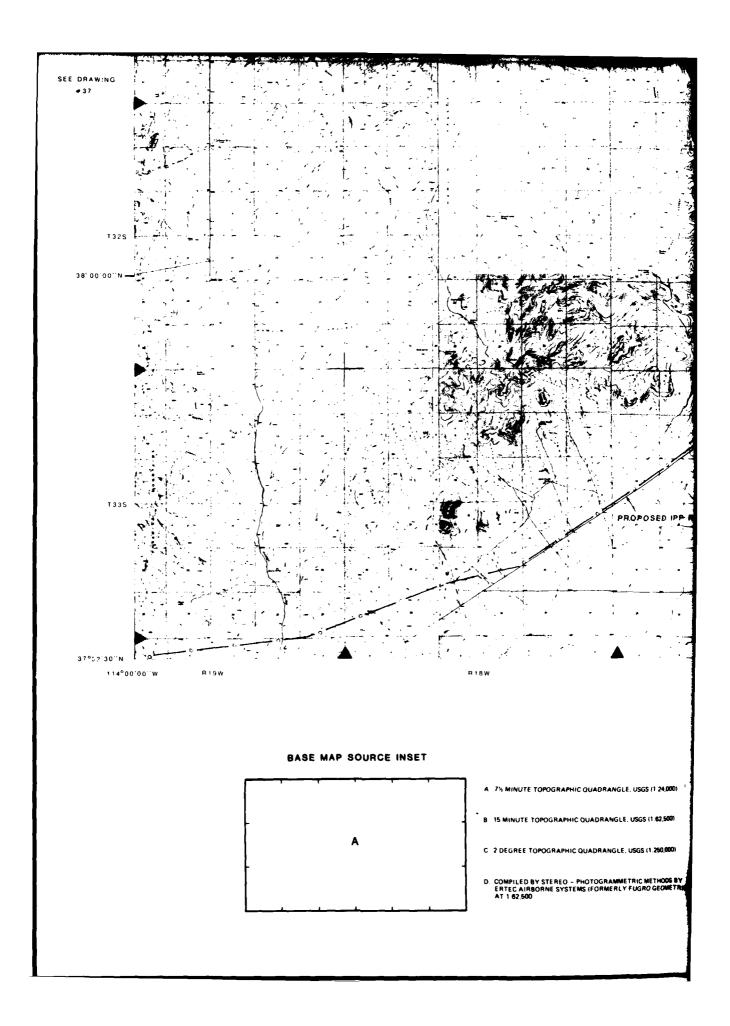


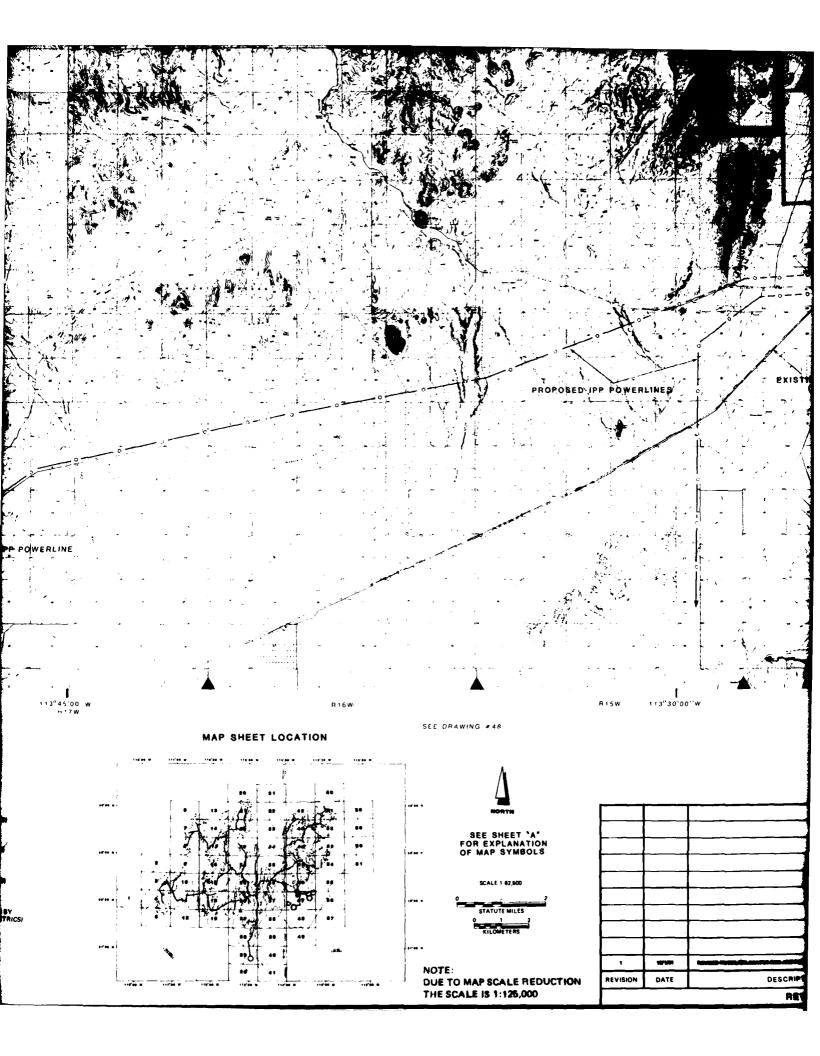


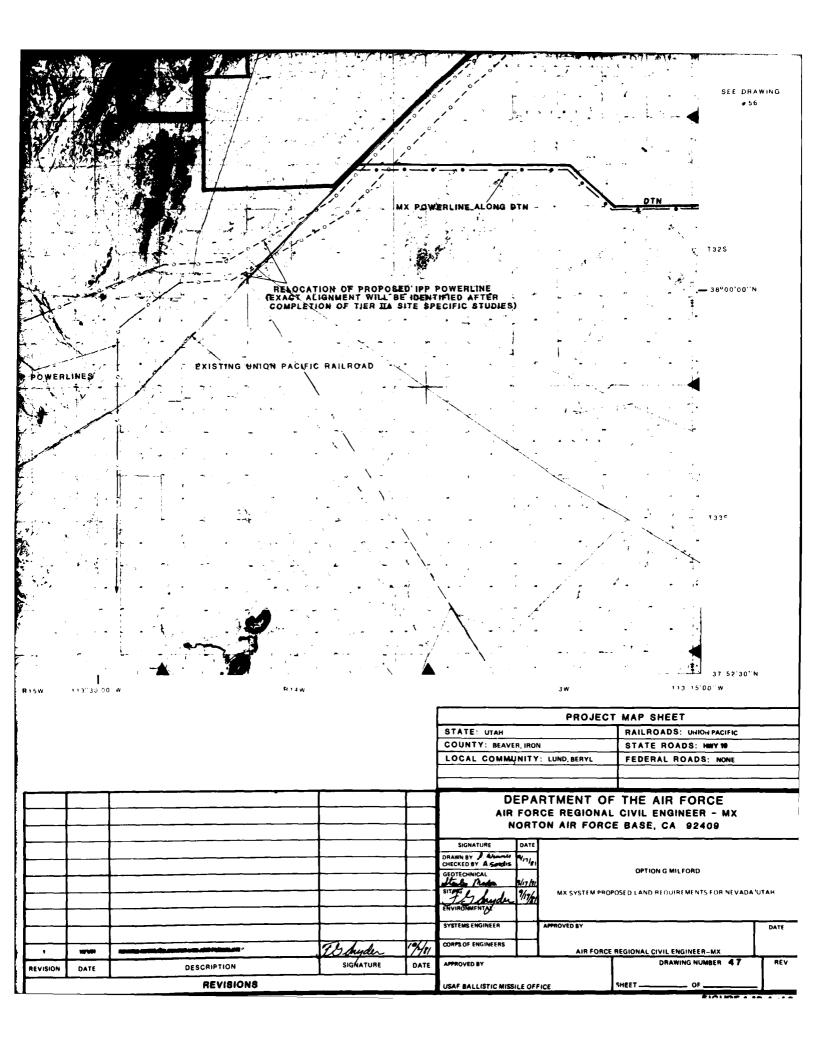




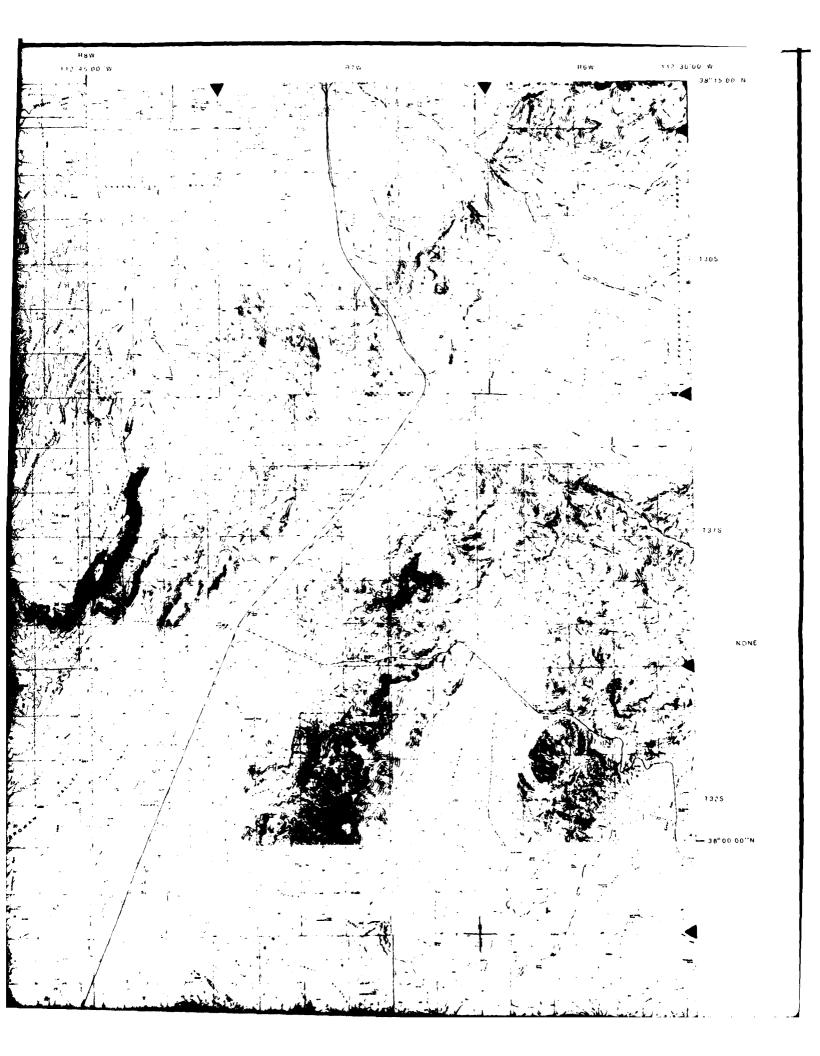


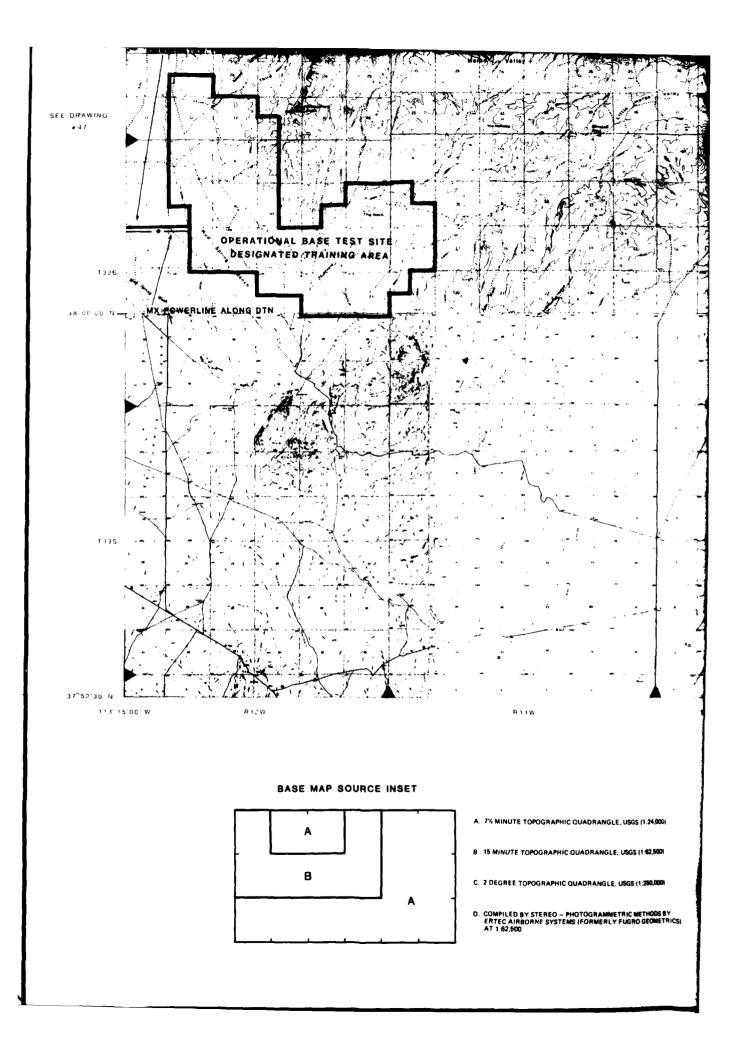


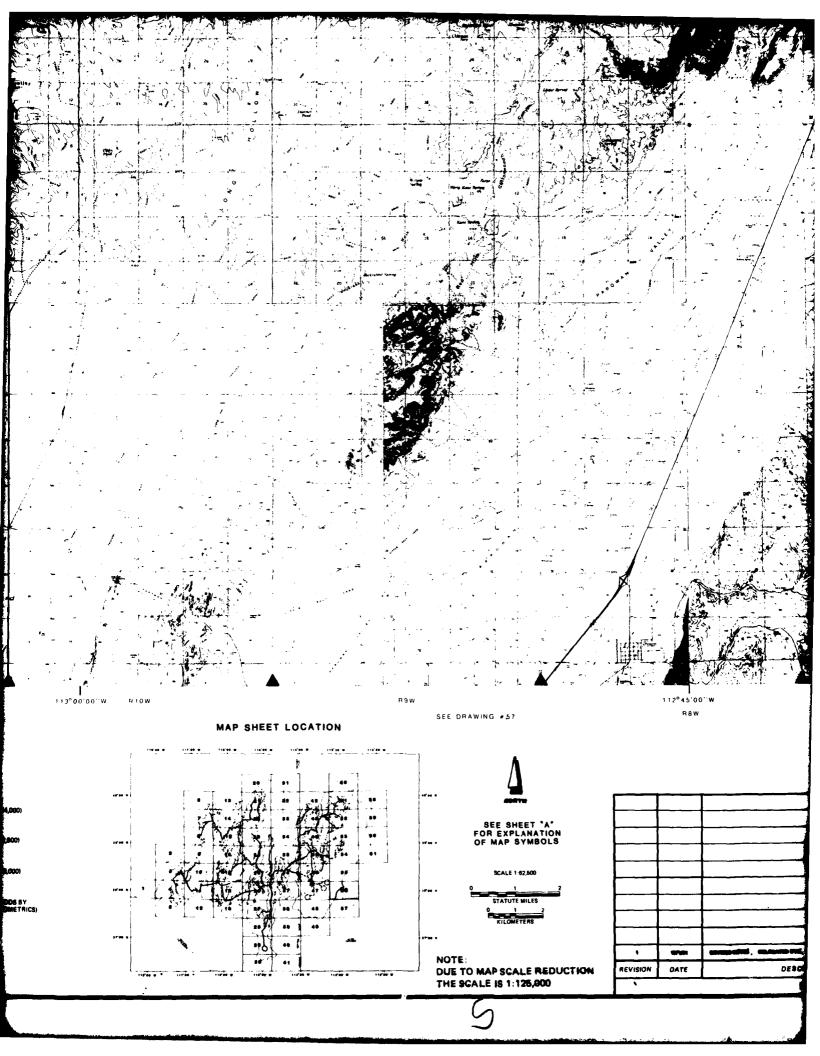


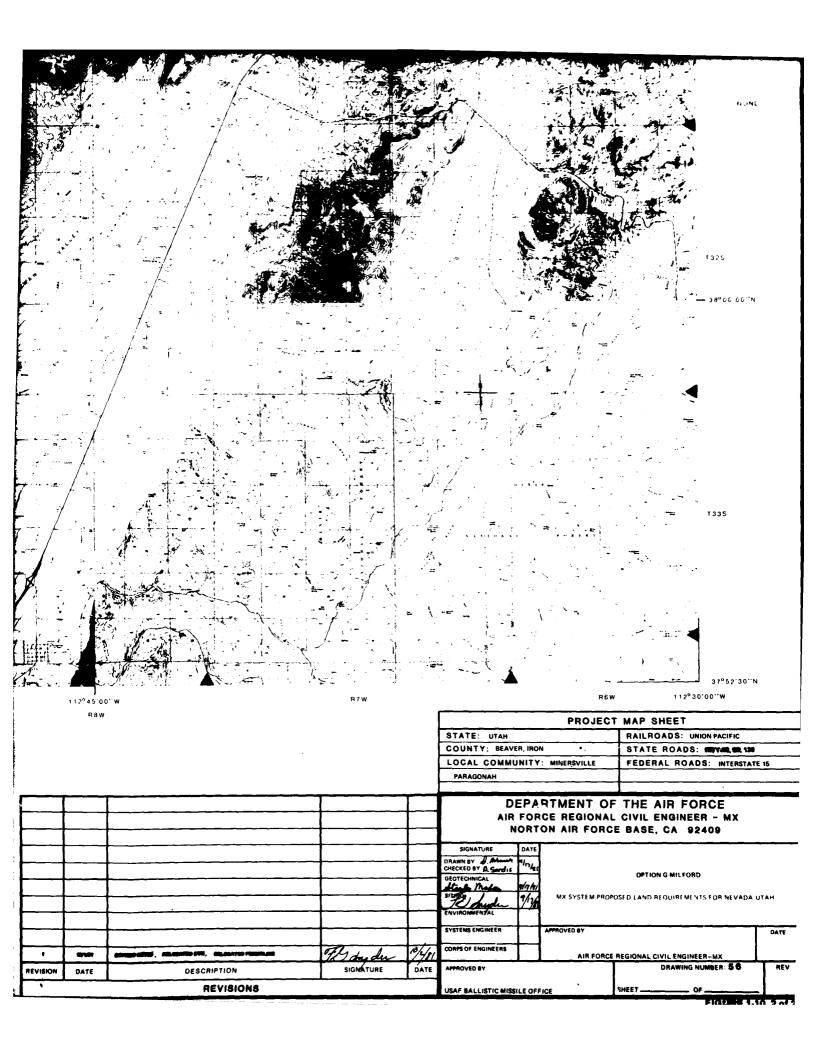


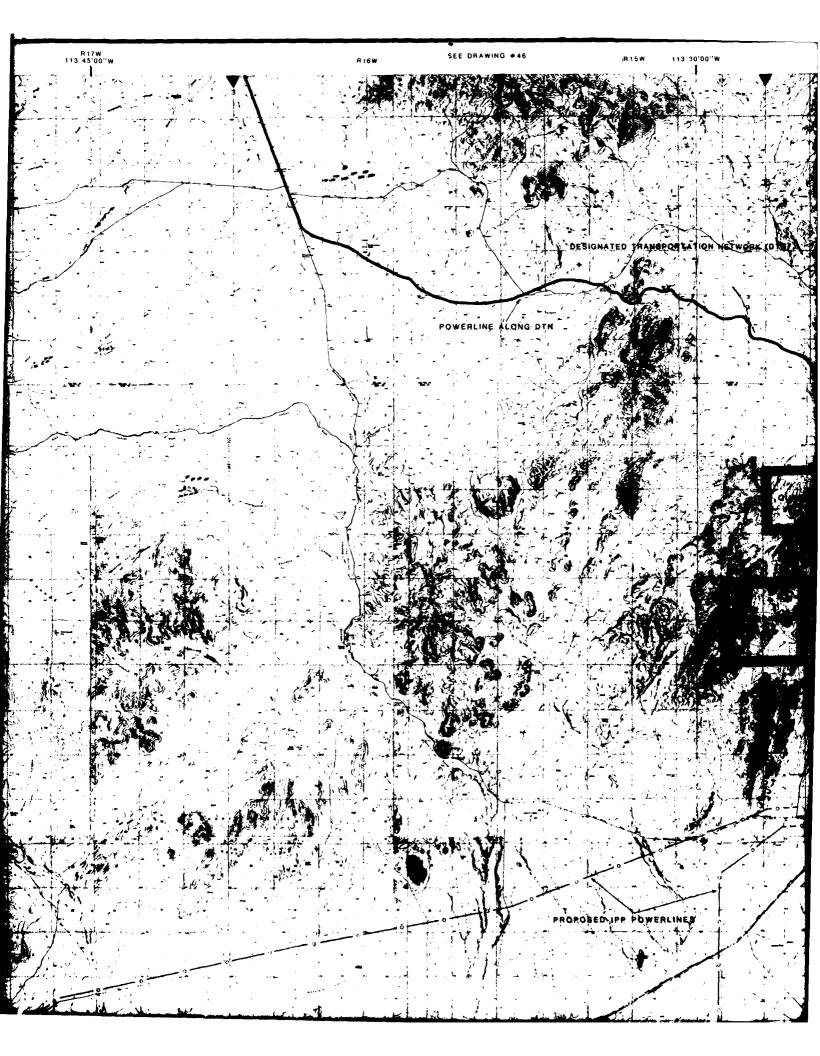


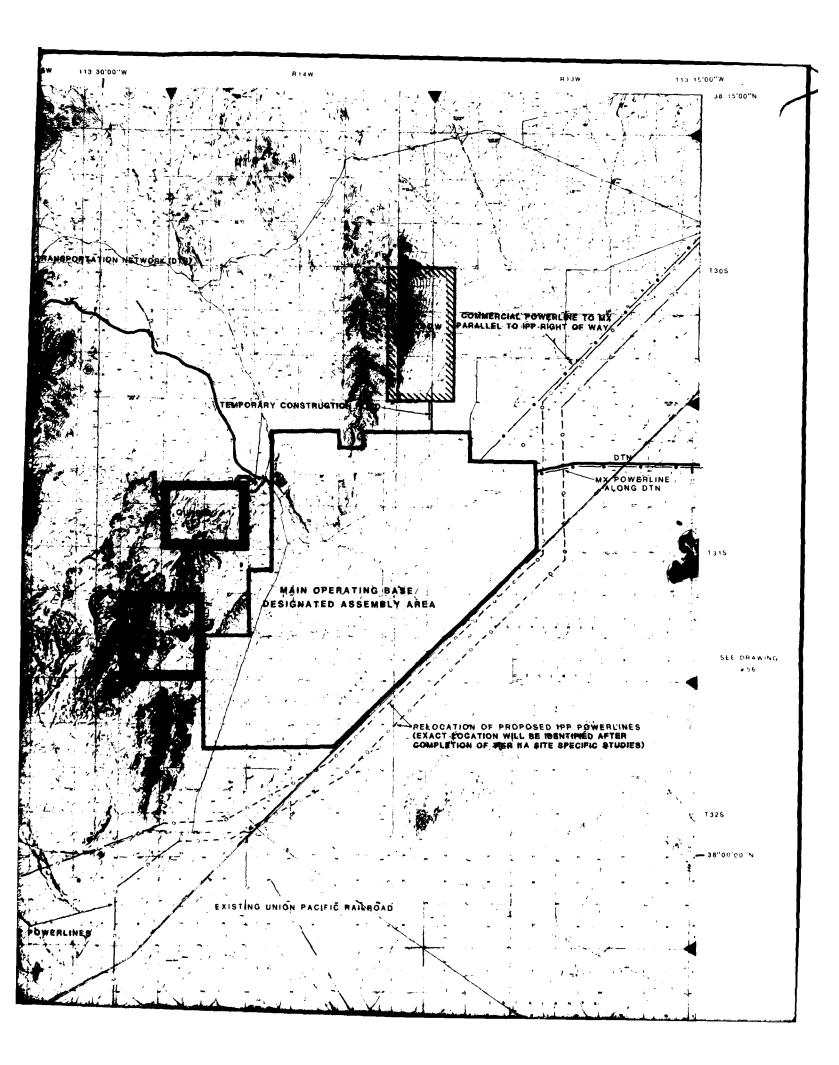


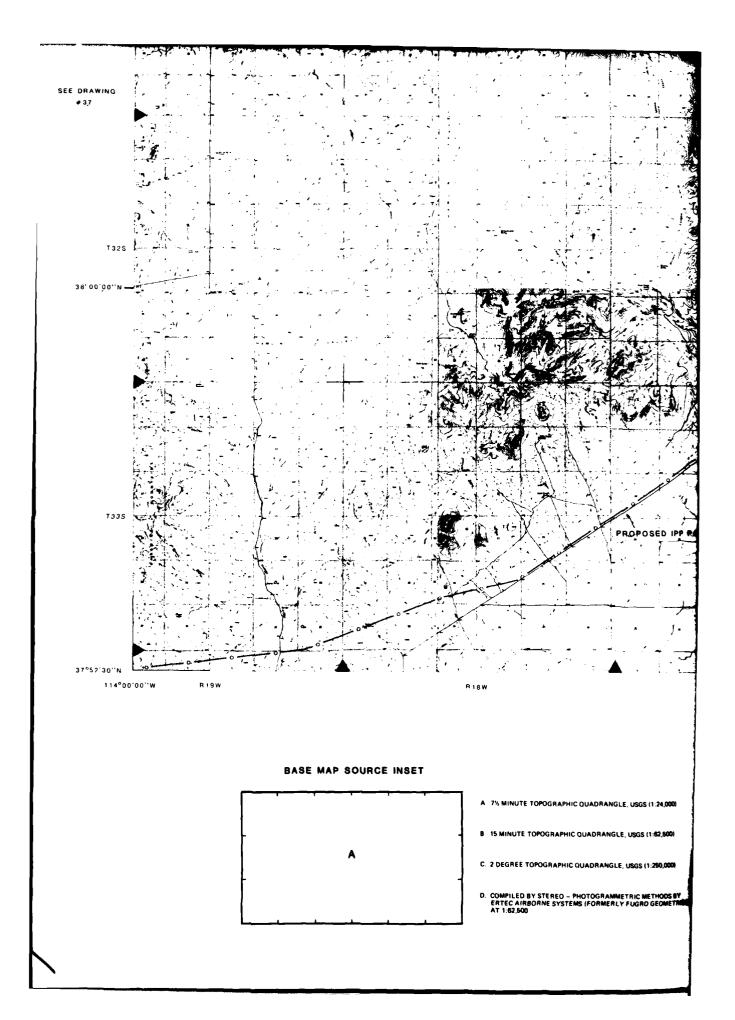


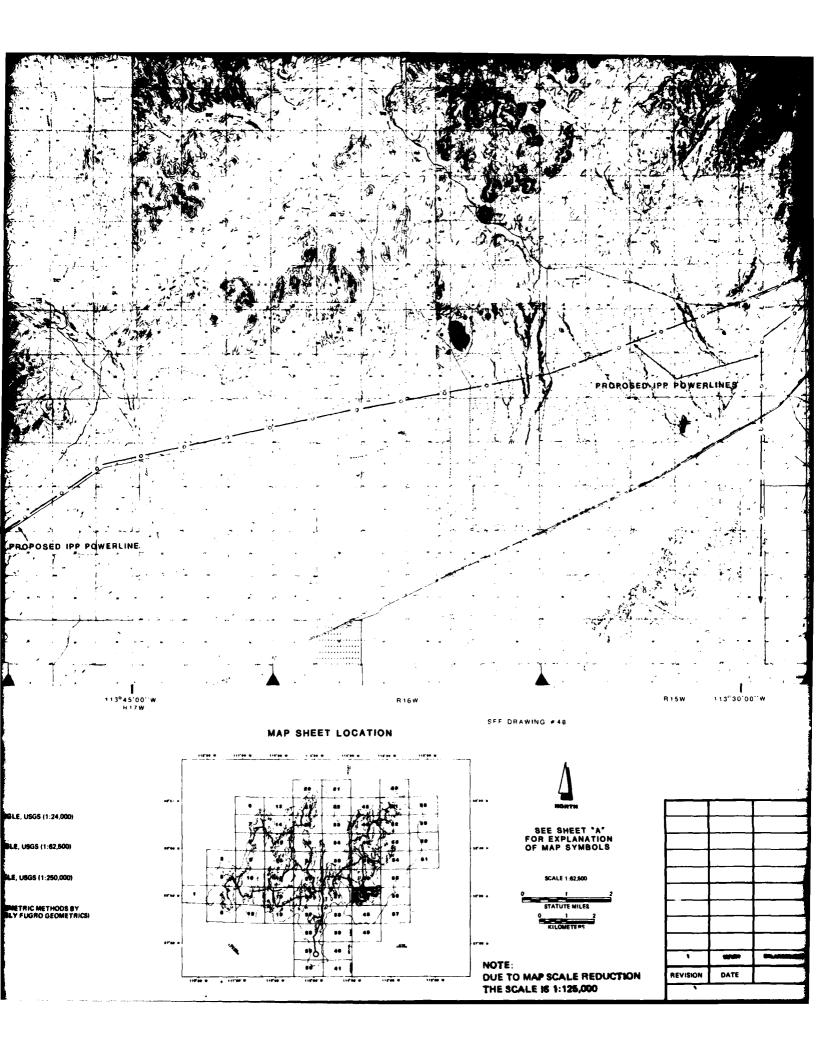


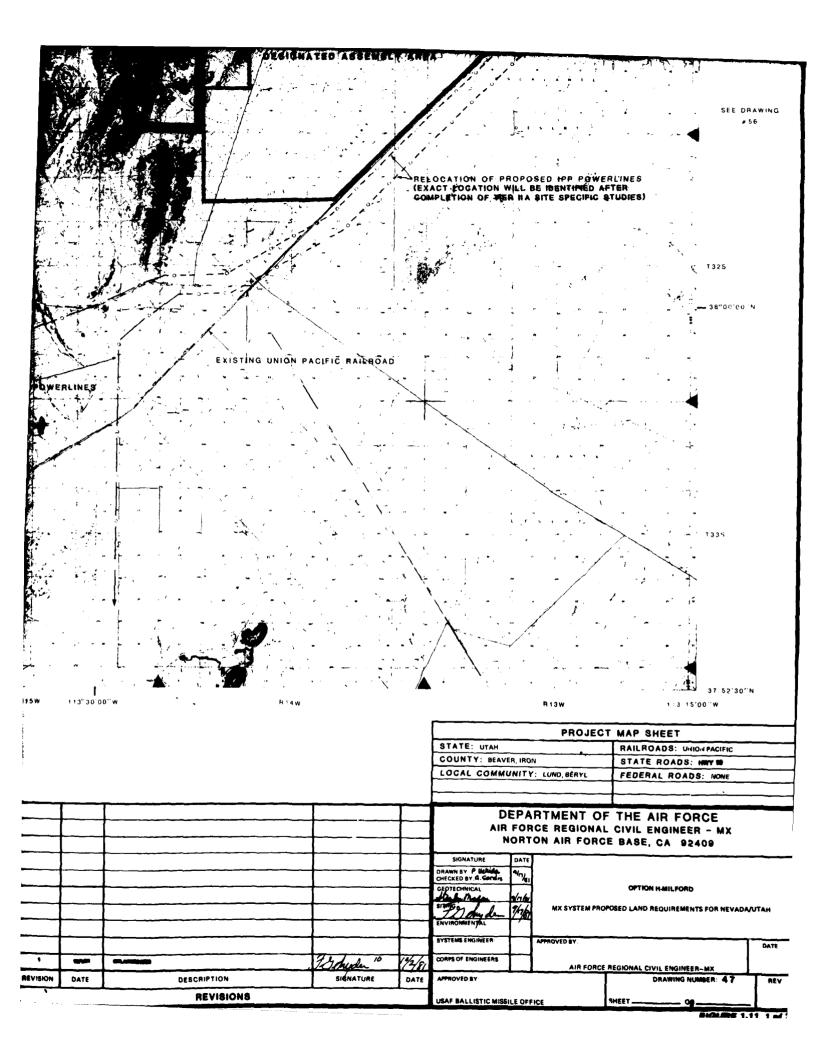


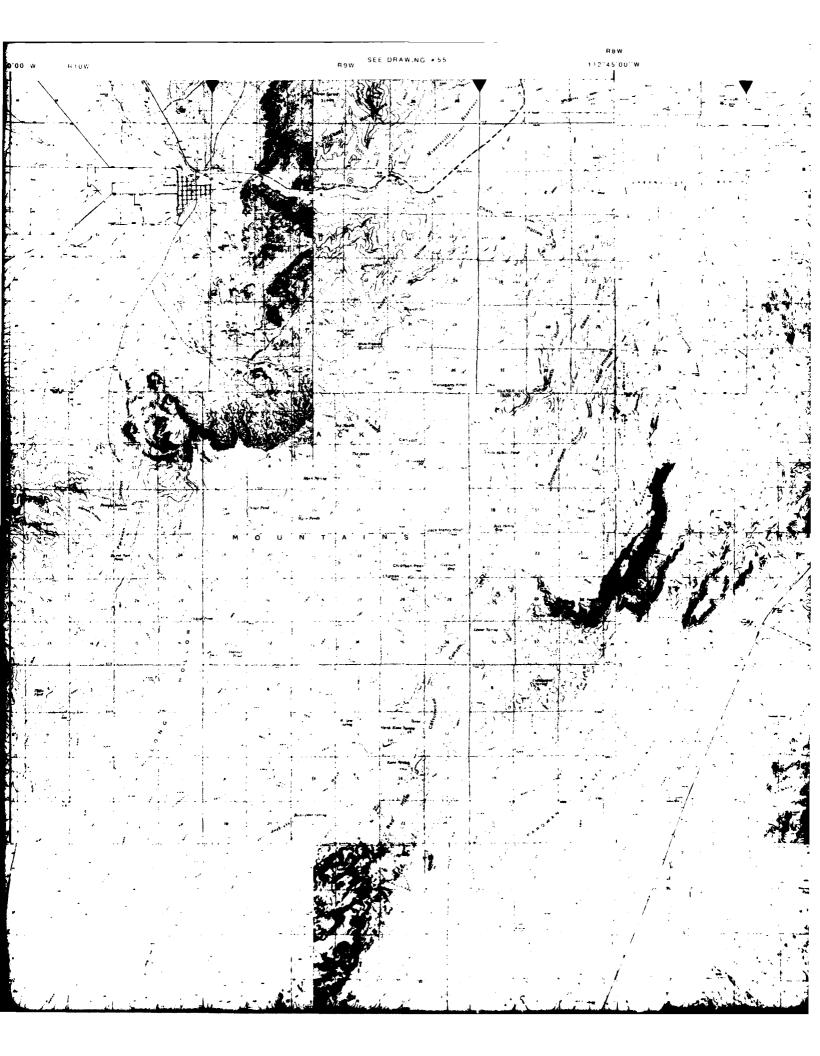


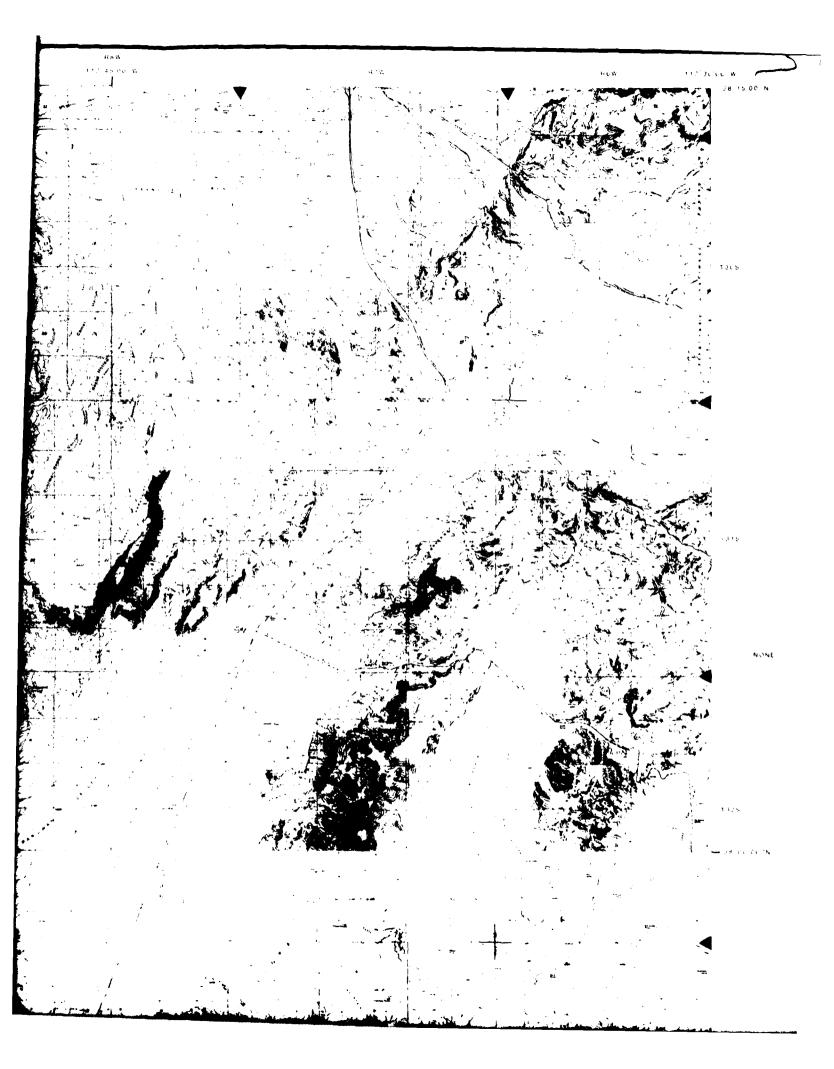






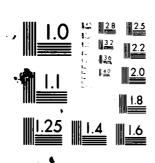






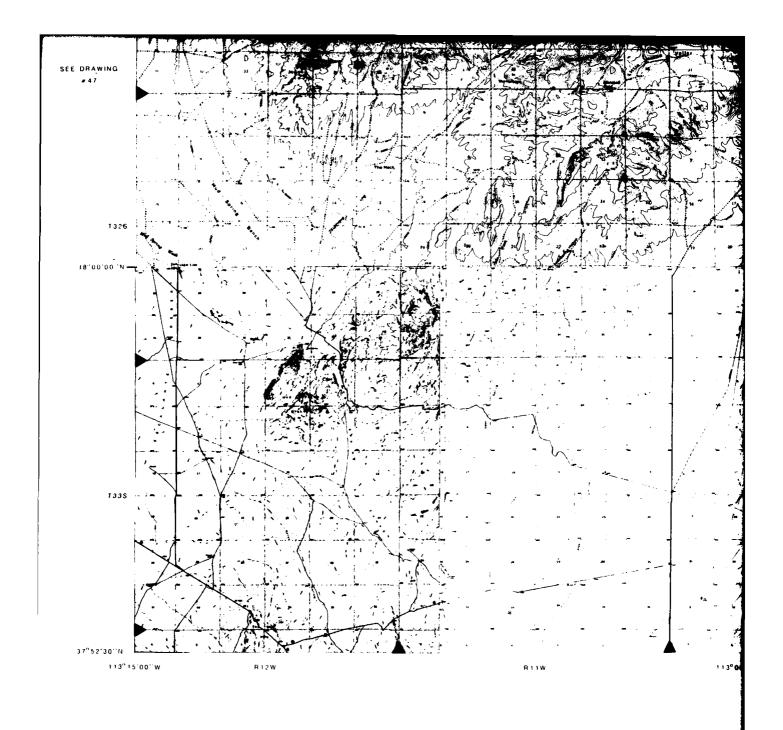
ERTEC WESTERN INC LONG BEACH CA F/6 13/2 MX SITING INVESTIGATION. MX SYSTEM SITING SUMMARY REPORT. LAND --ETC(U) JAN 82 F04704-80-C-0006 PC-TR-58-VOL-3 AD-A113 218 UNCLASSIFIED 1419

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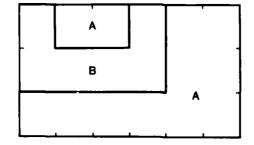


MICROCOPY RESOLUTION TEST CHART ...

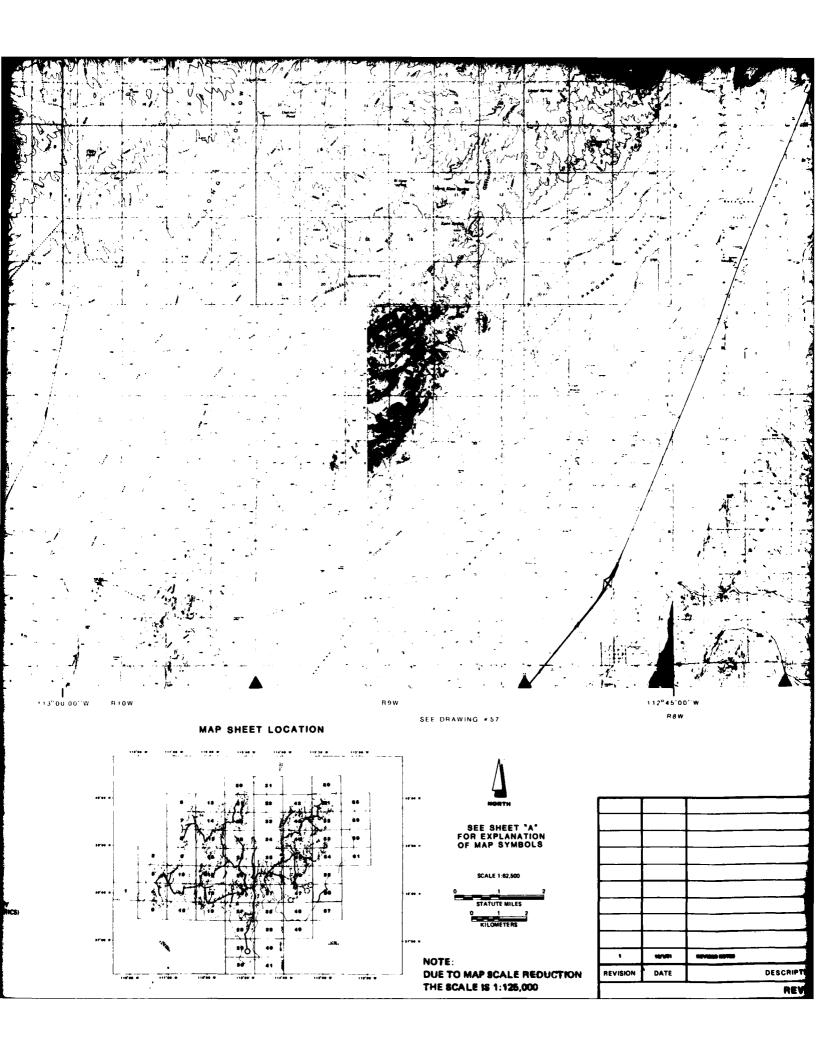
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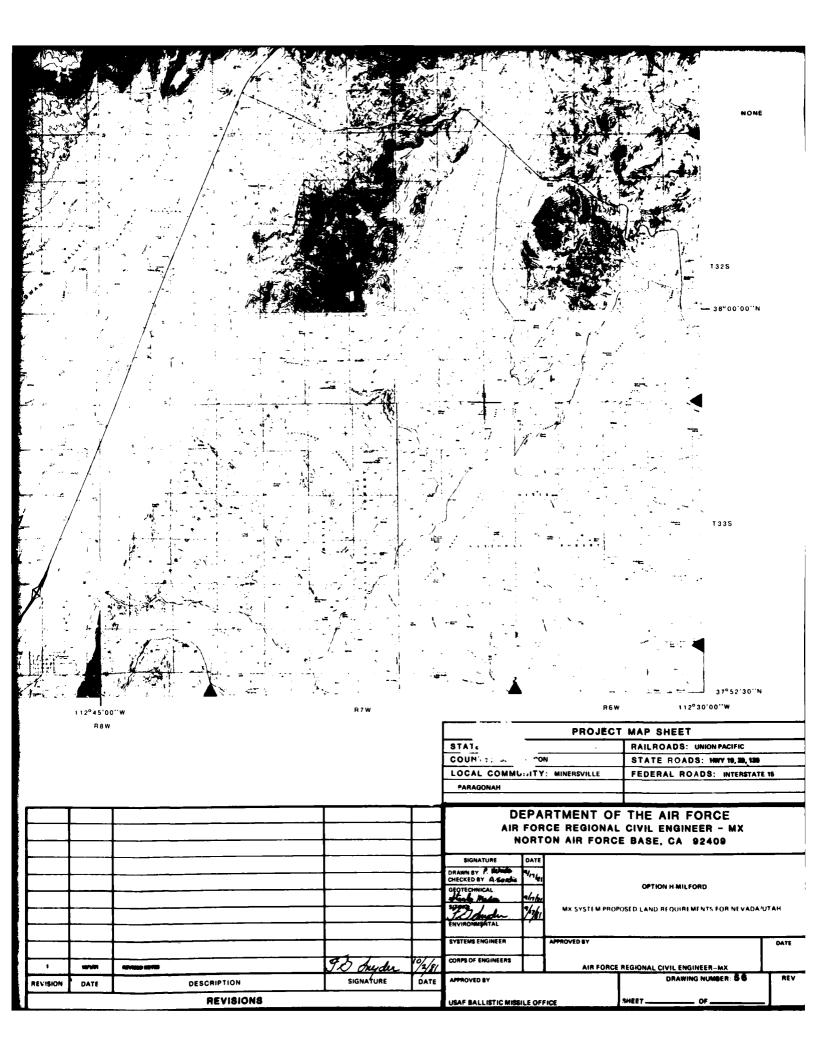


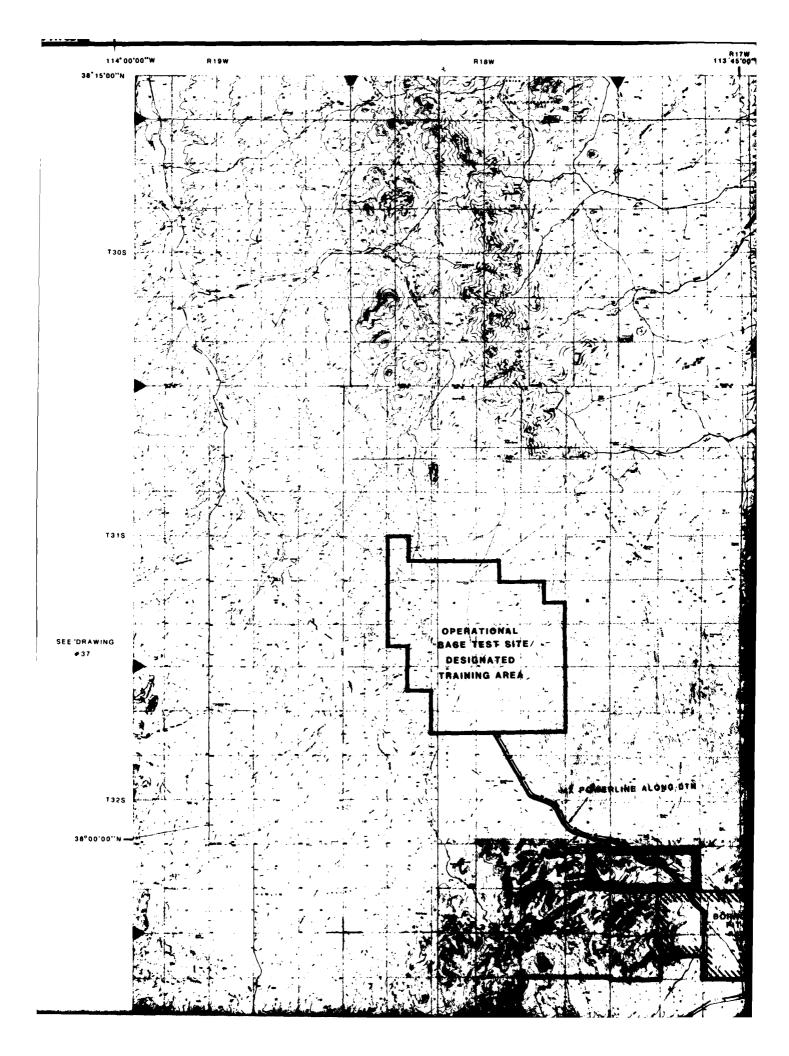
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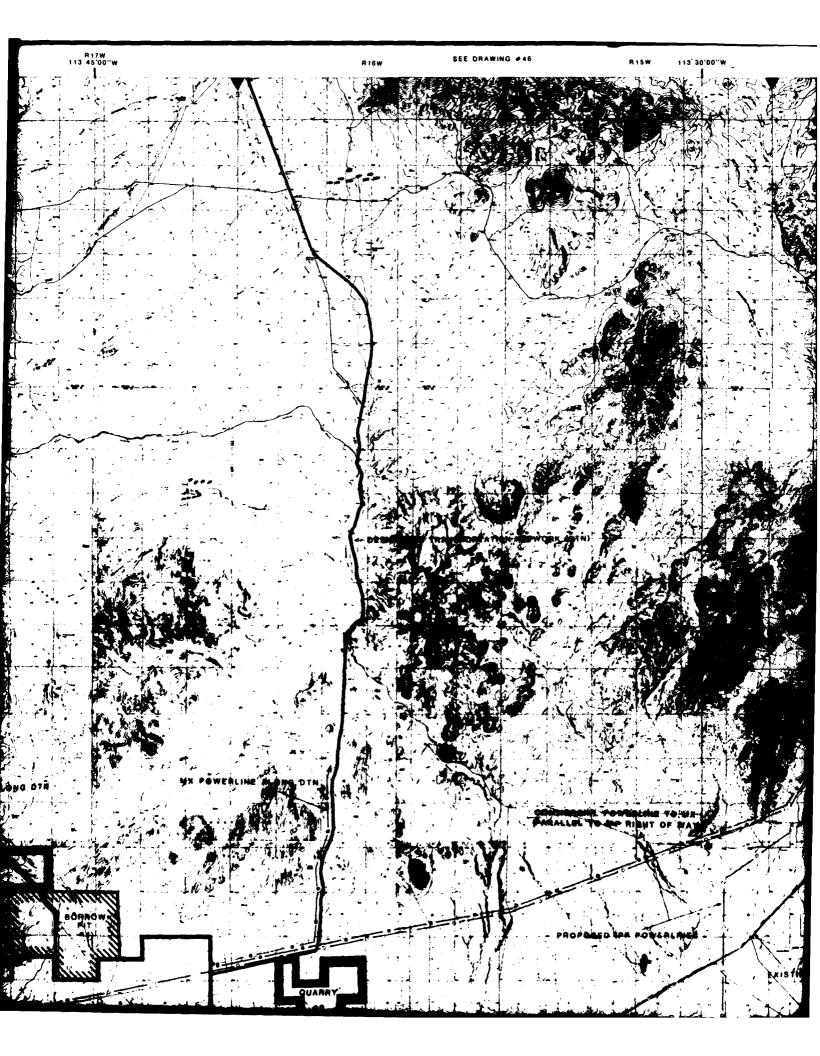


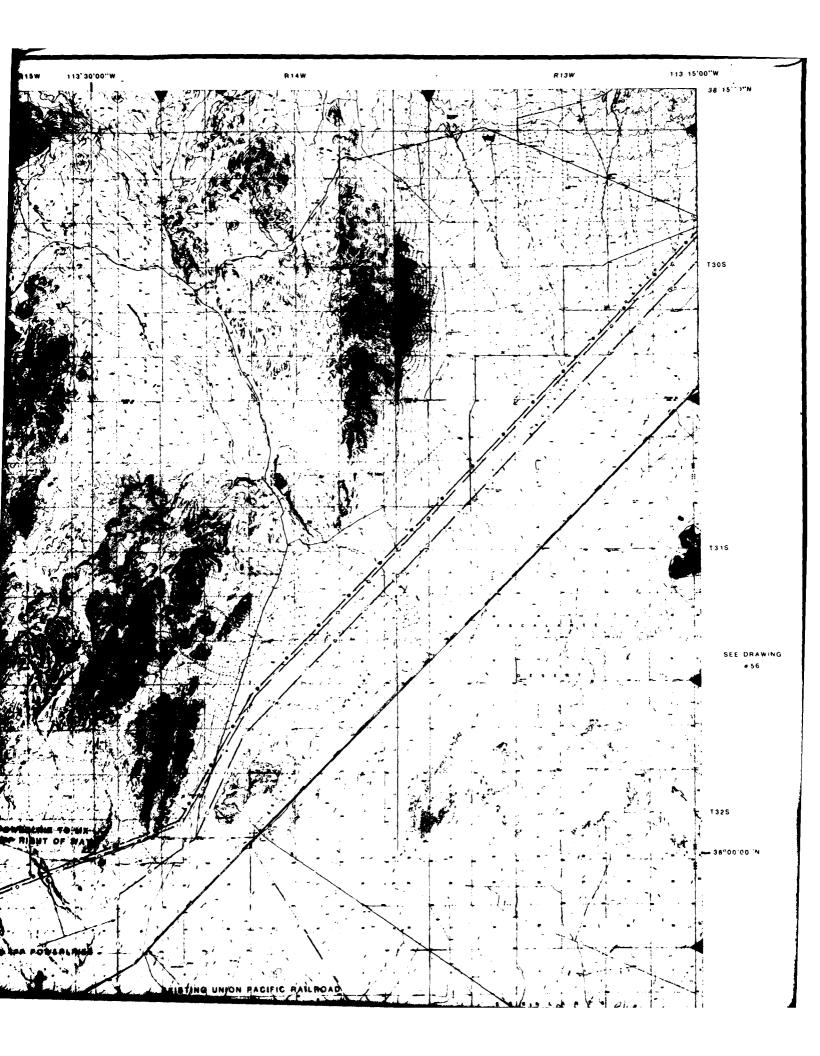
- A. 7% MINUTE TOPOGRAPHIC QUADRANGLE, USGS (1:24,000)
- B. 15 MINUTE TOPOGRAPHIC QUADRANGLE, USGS (1:62,500)
- C. 2 DEGREE TOPOGRAPHIC QUADRANGLE, USGS (1:260,000)
- D. COMPILED BY STEREO PHOTOGRAMMETRIC METHODS BY ERTEC AIRBORNE SYSTEMS (FORMERLY FUGRO GEOMETRICS) AT 1:62,500

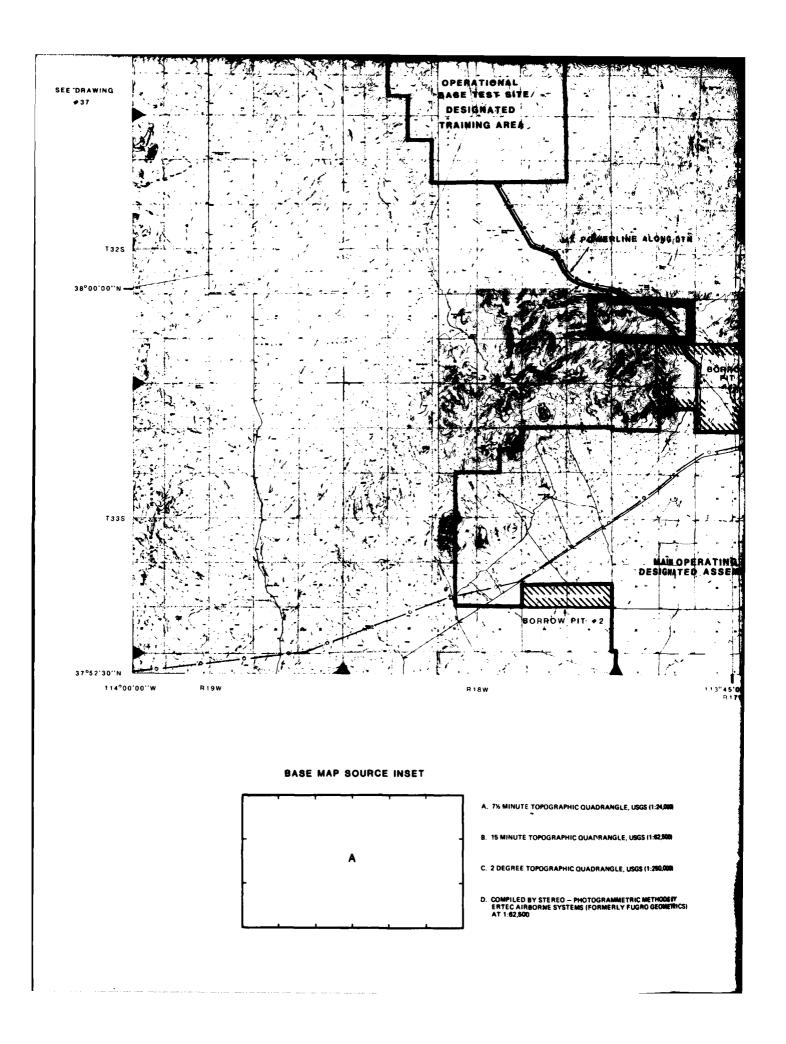


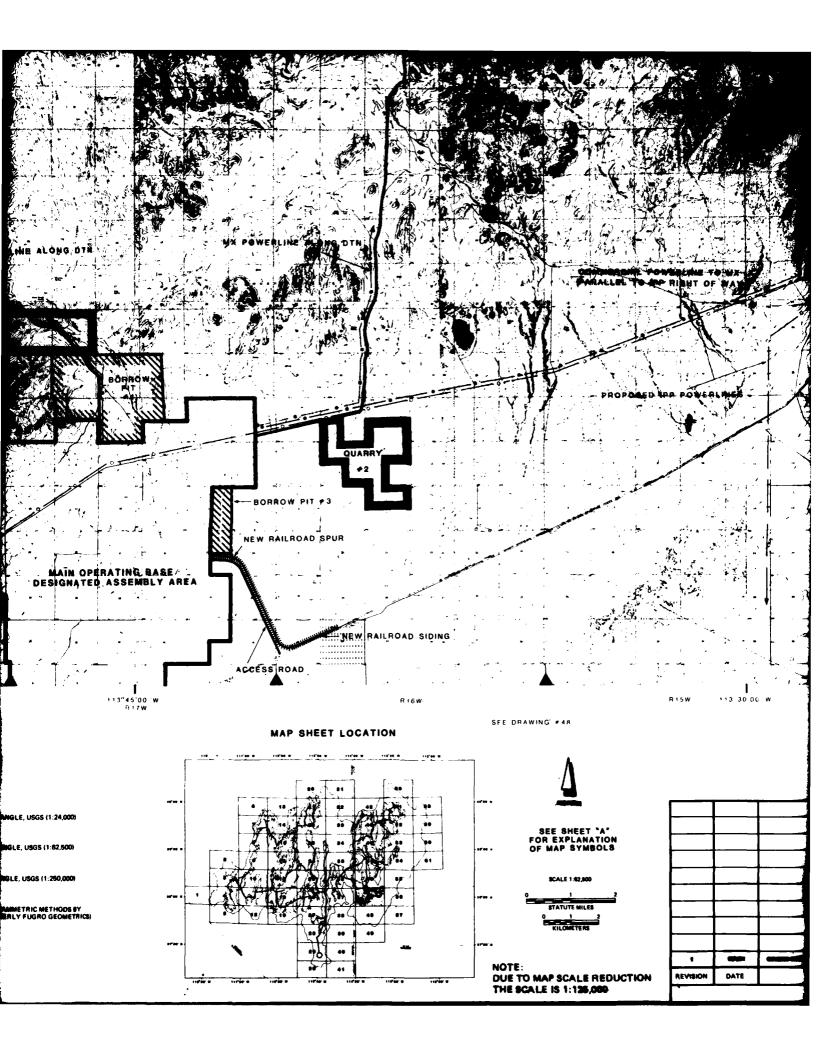


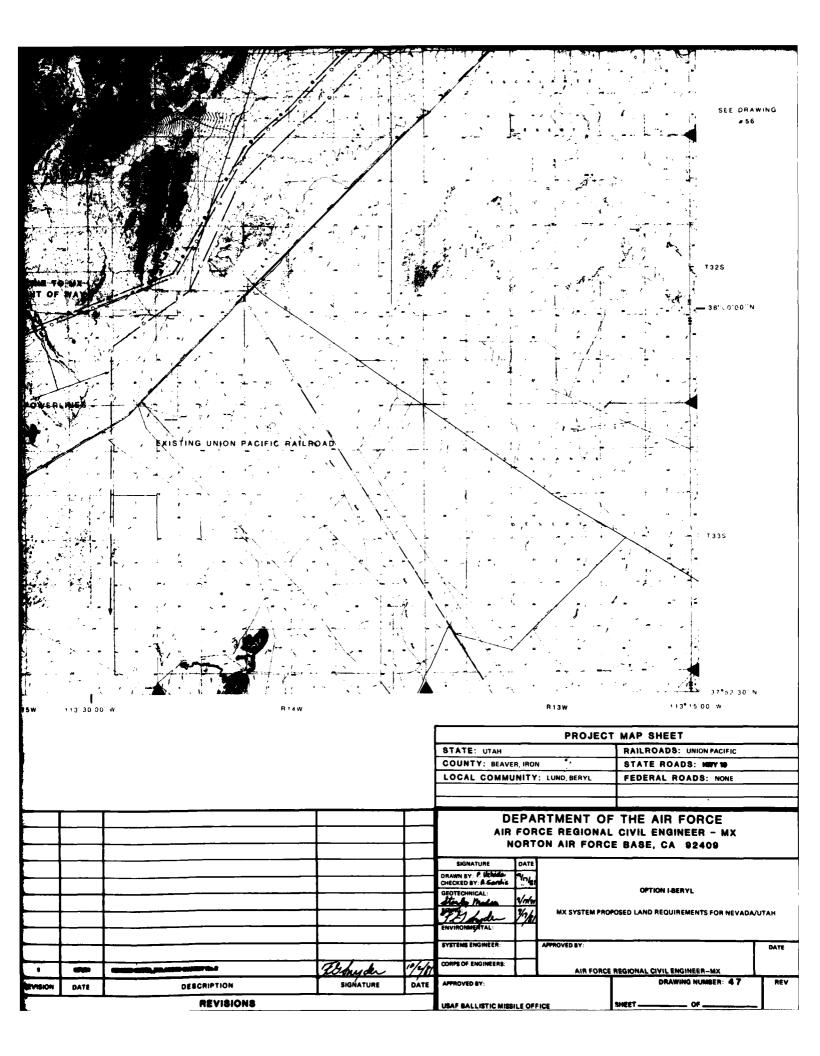


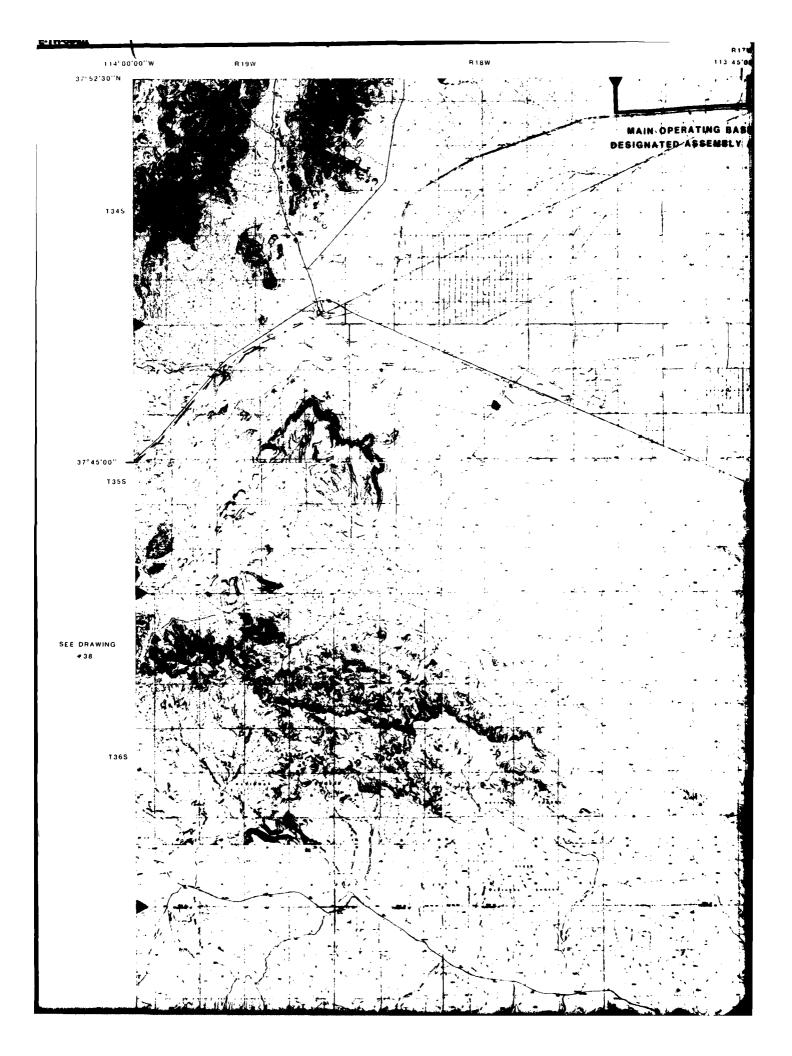




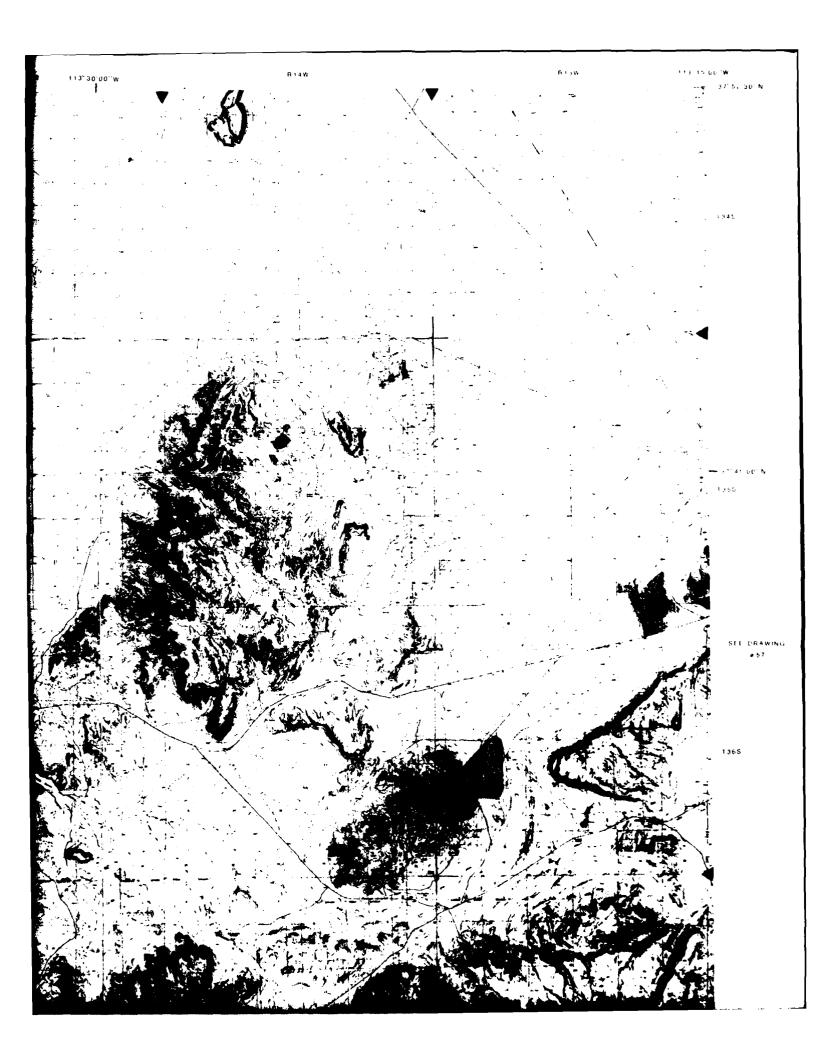


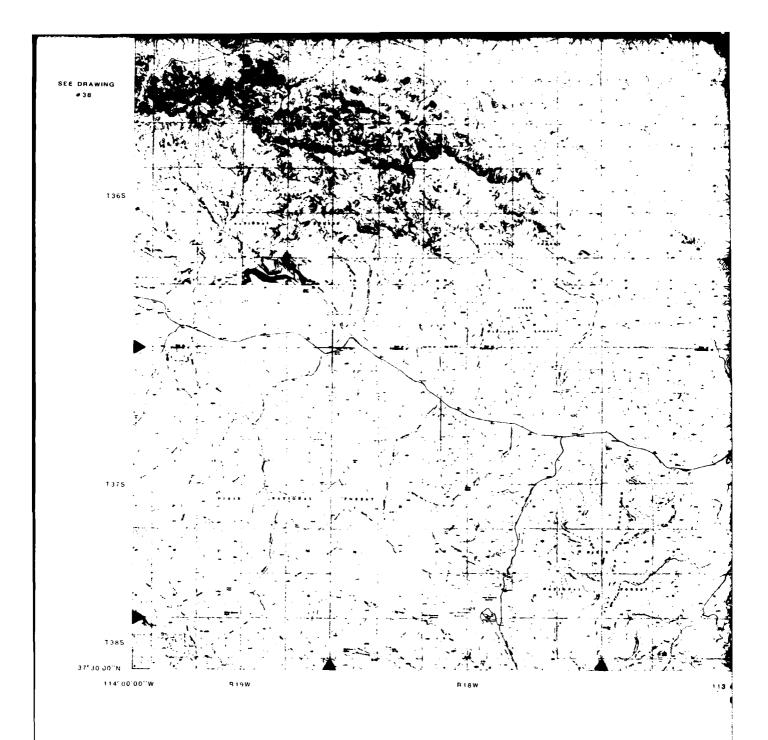


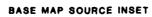


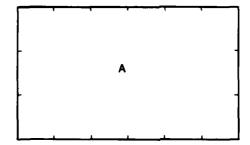




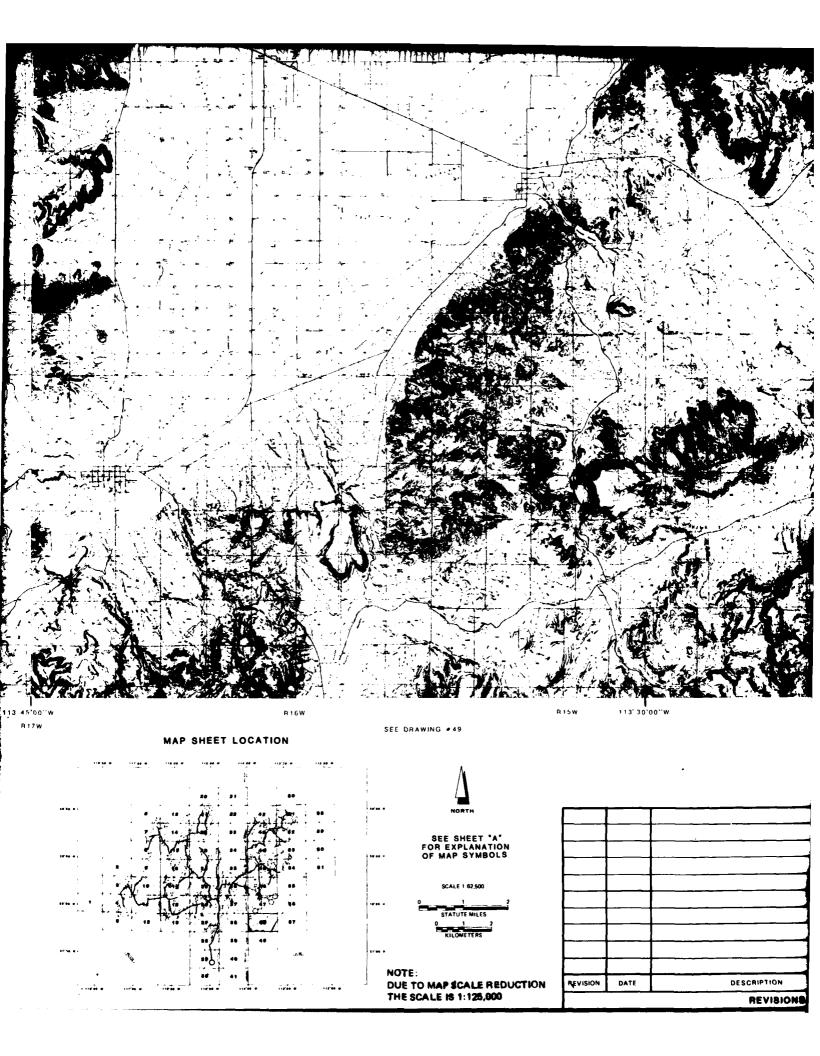


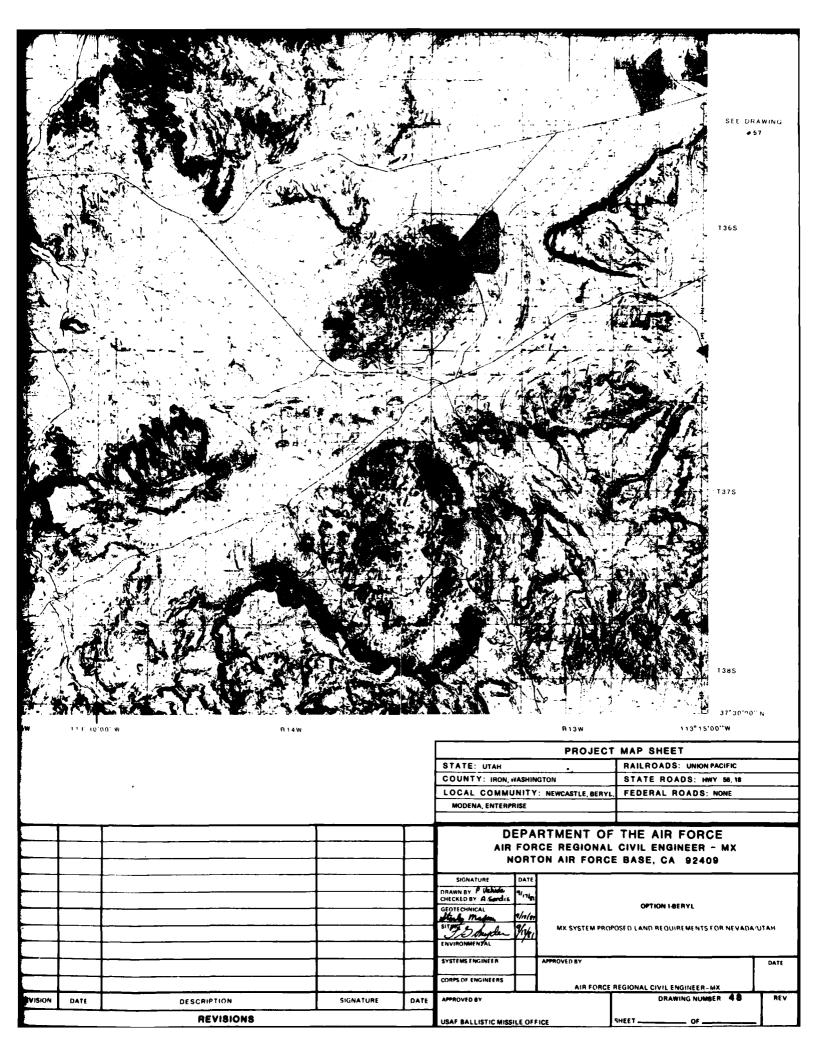


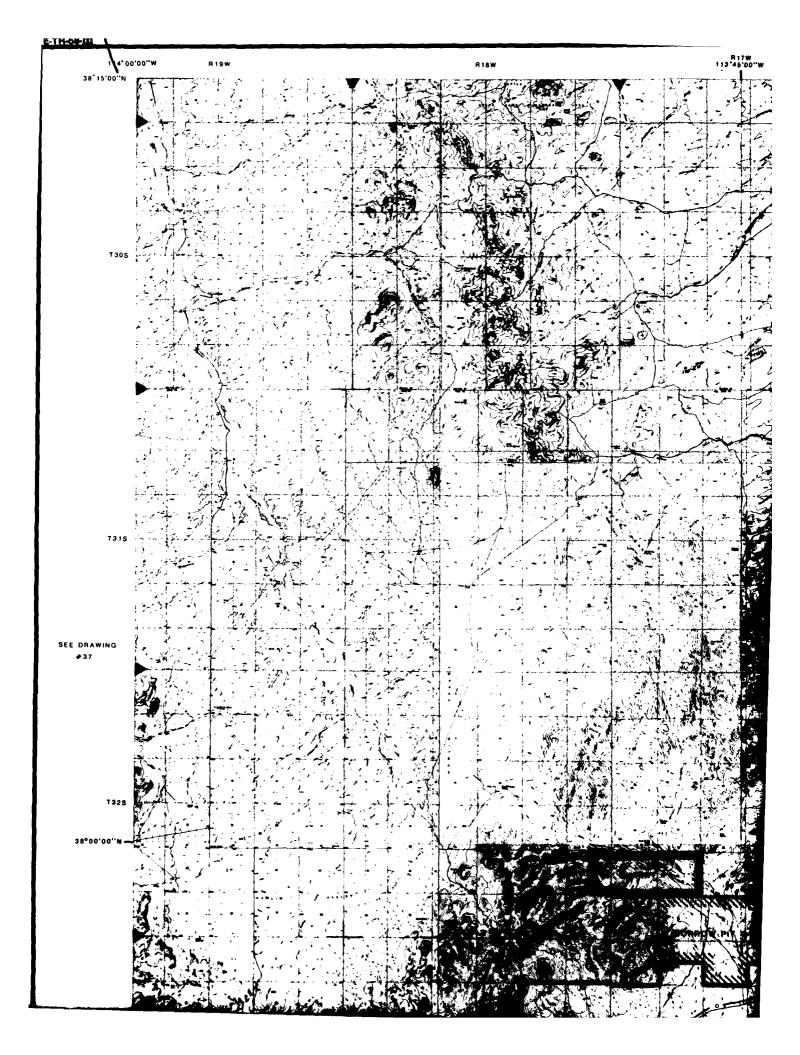


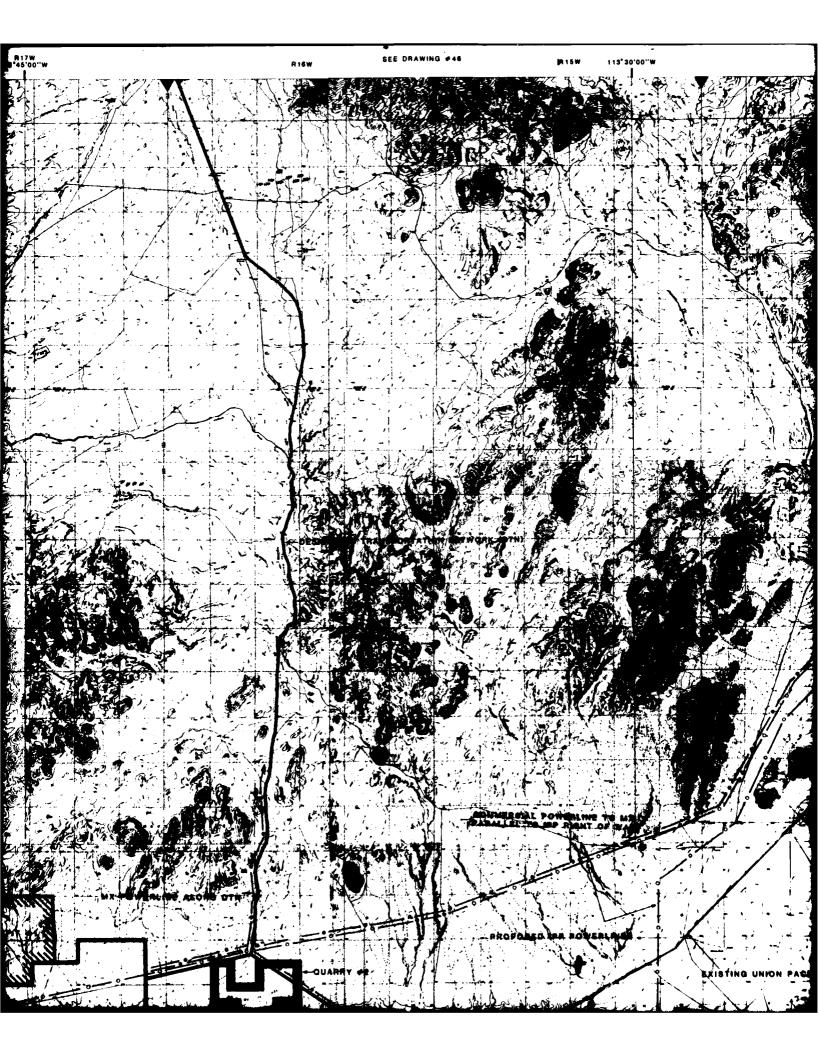


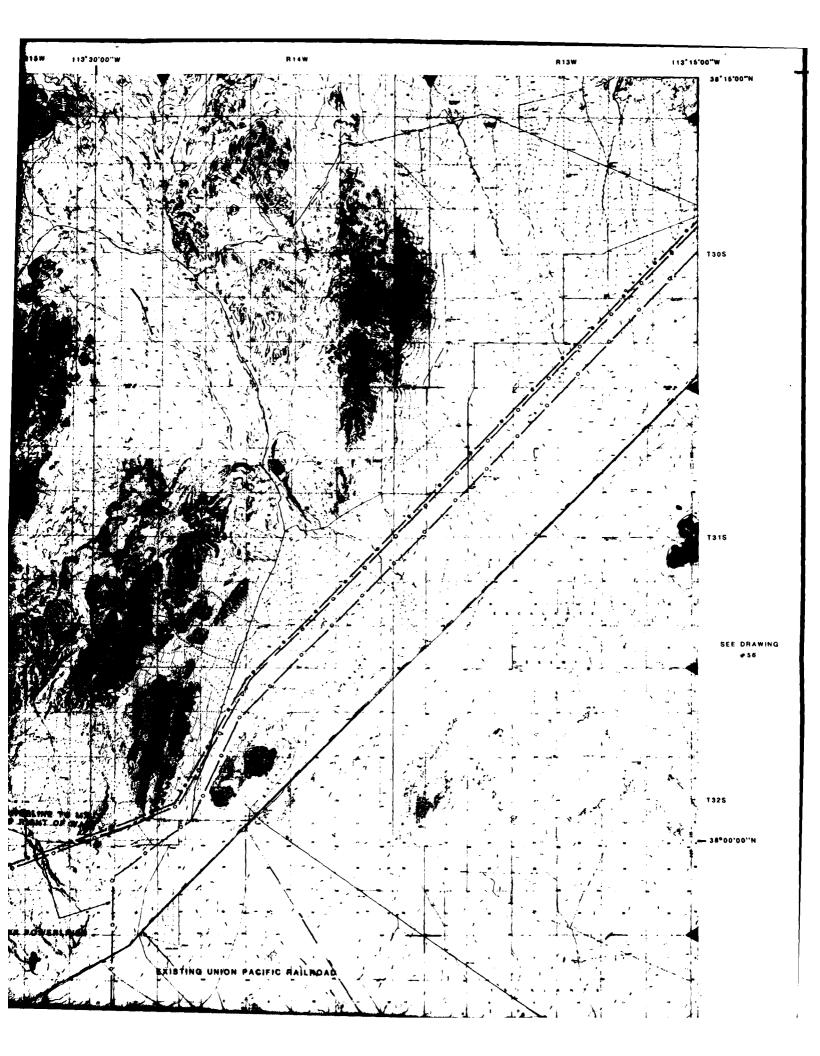
- A. 7% MINUTE POPOGRAPHIC QUADRANGLE, USGS (1:24,000)
- 8. 15 MINUTÉ TOPOGRAPHIC QUADRANGLE, USGS (1:62,500)
- C. 2 DEGREE TOPOGRAPHIC QUADRANGLE, USGS (1:250,000)
- D. COMPILED BY STEREO PHOTOGRAMMETRIC METHODS BY ERTEC AIRBORNE SYSTEMS (FORMERLY PUGRO GEOMETRICS) AT 1:62,500

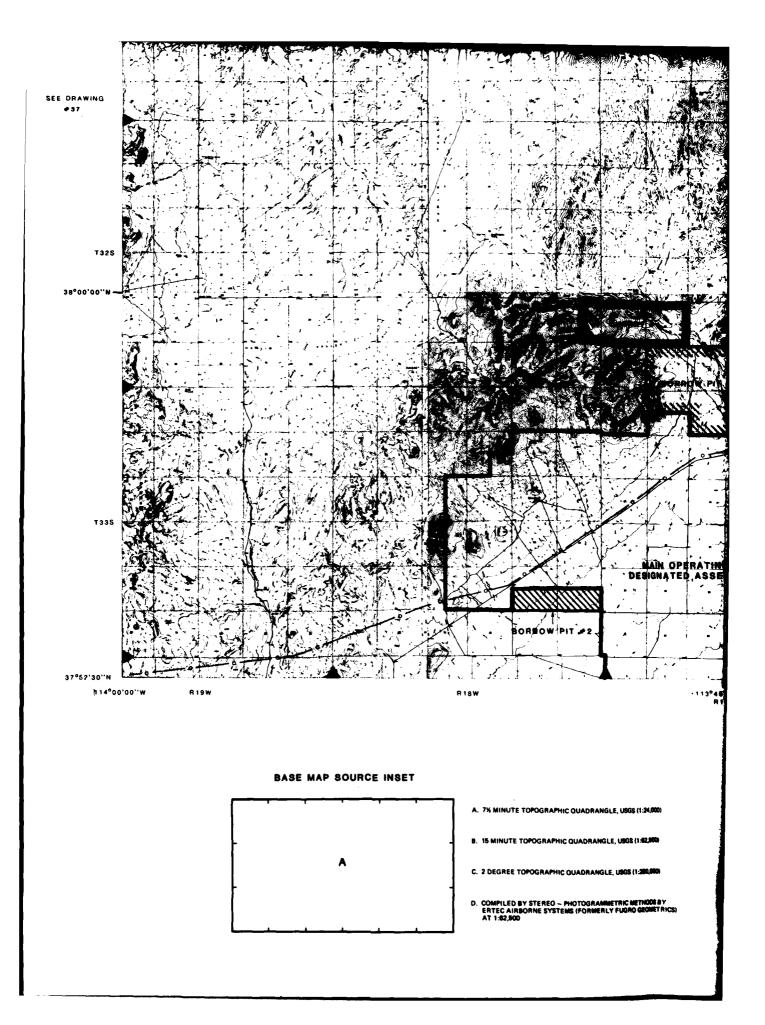


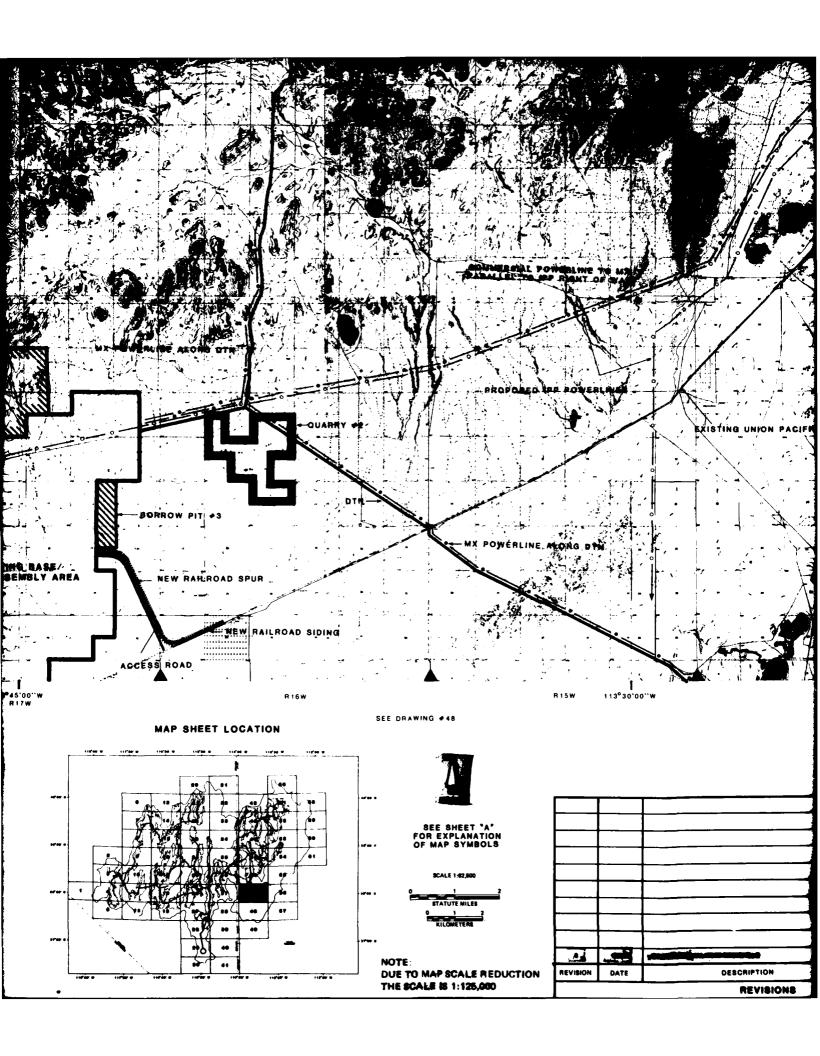


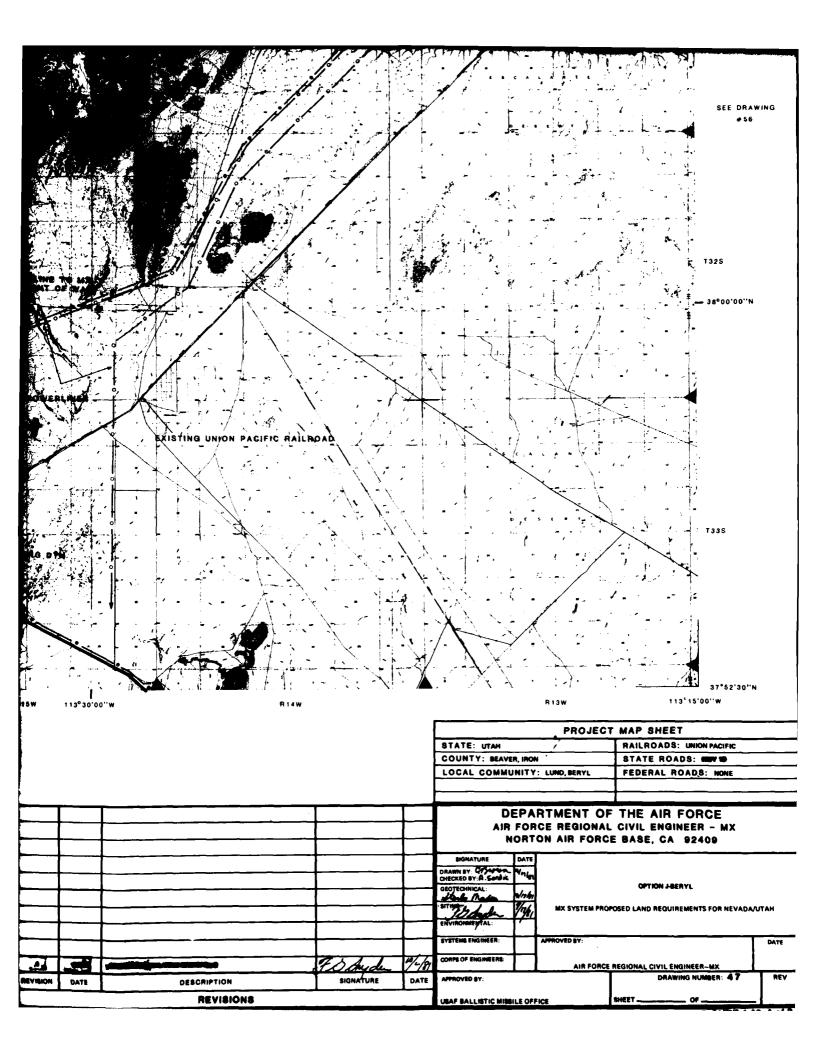


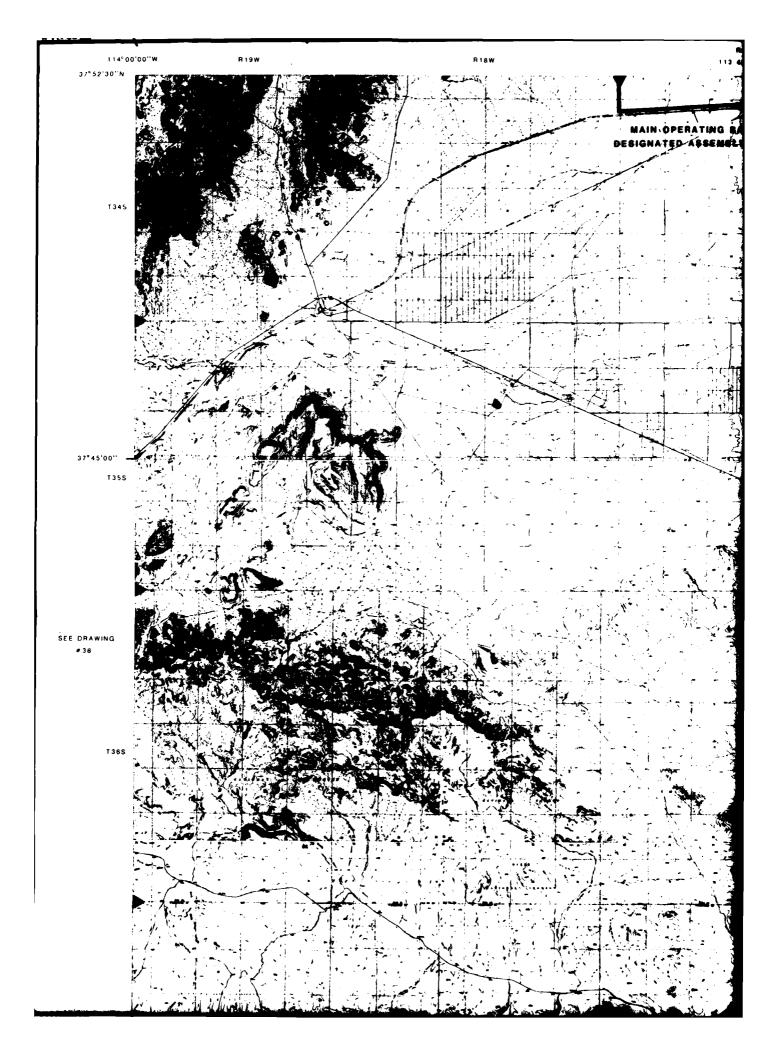


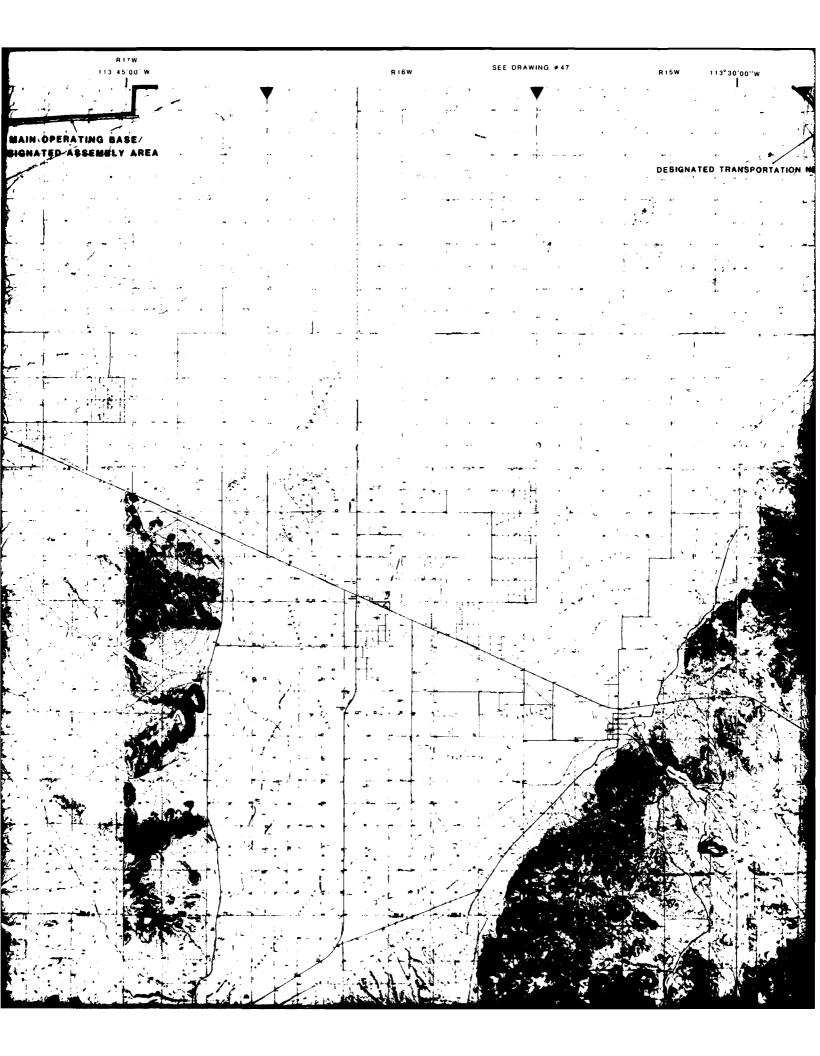


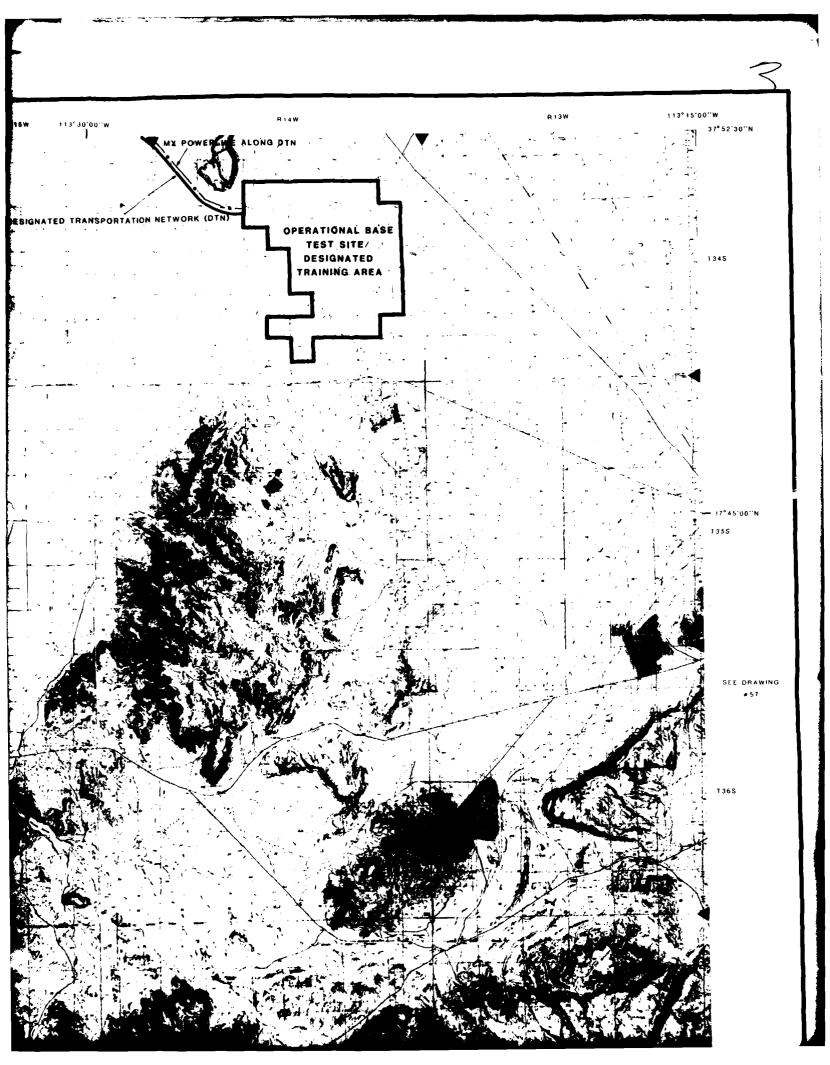


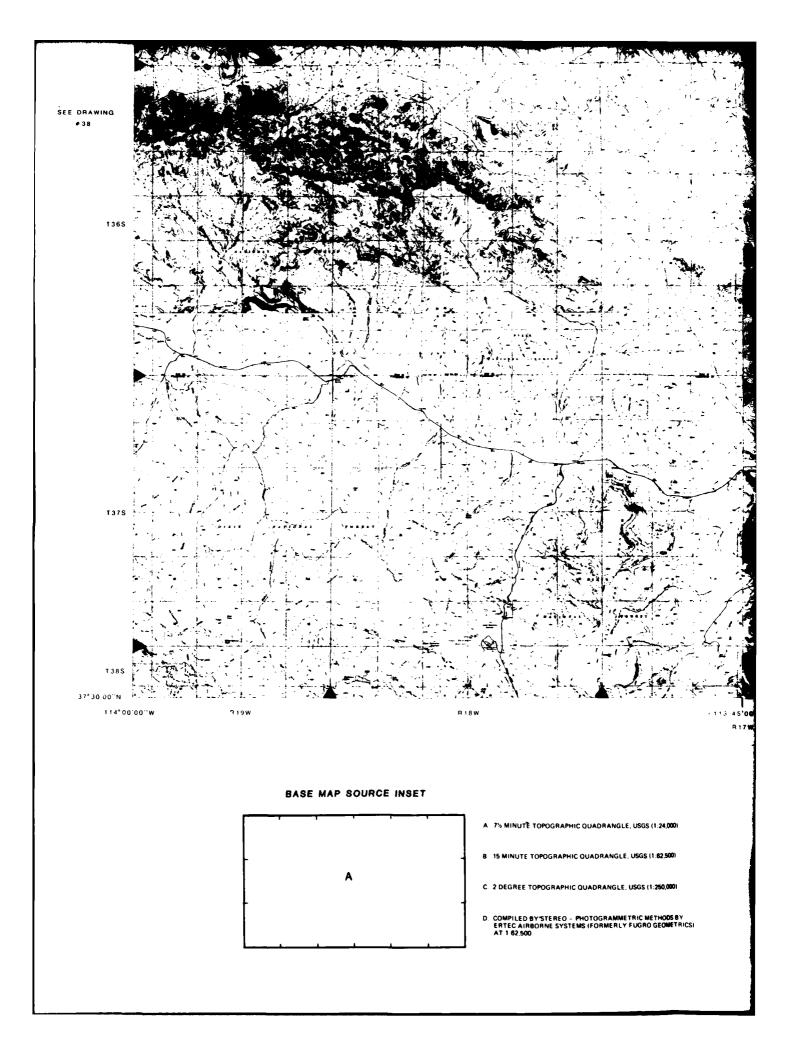


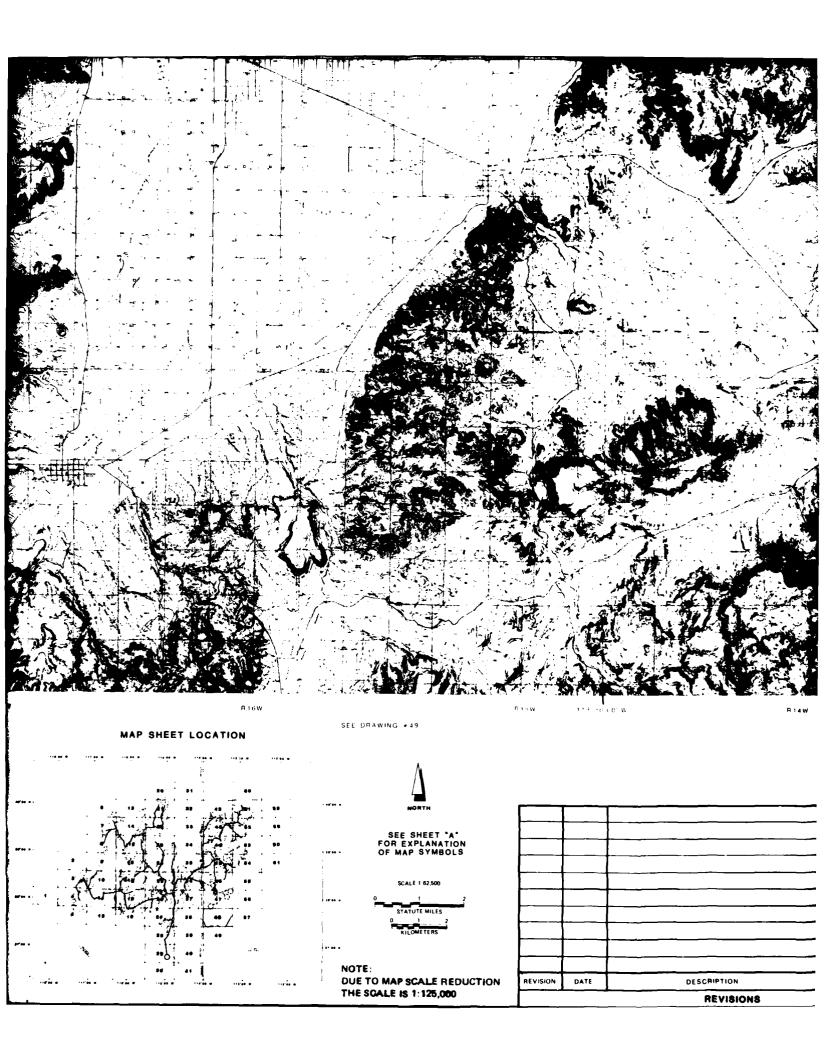


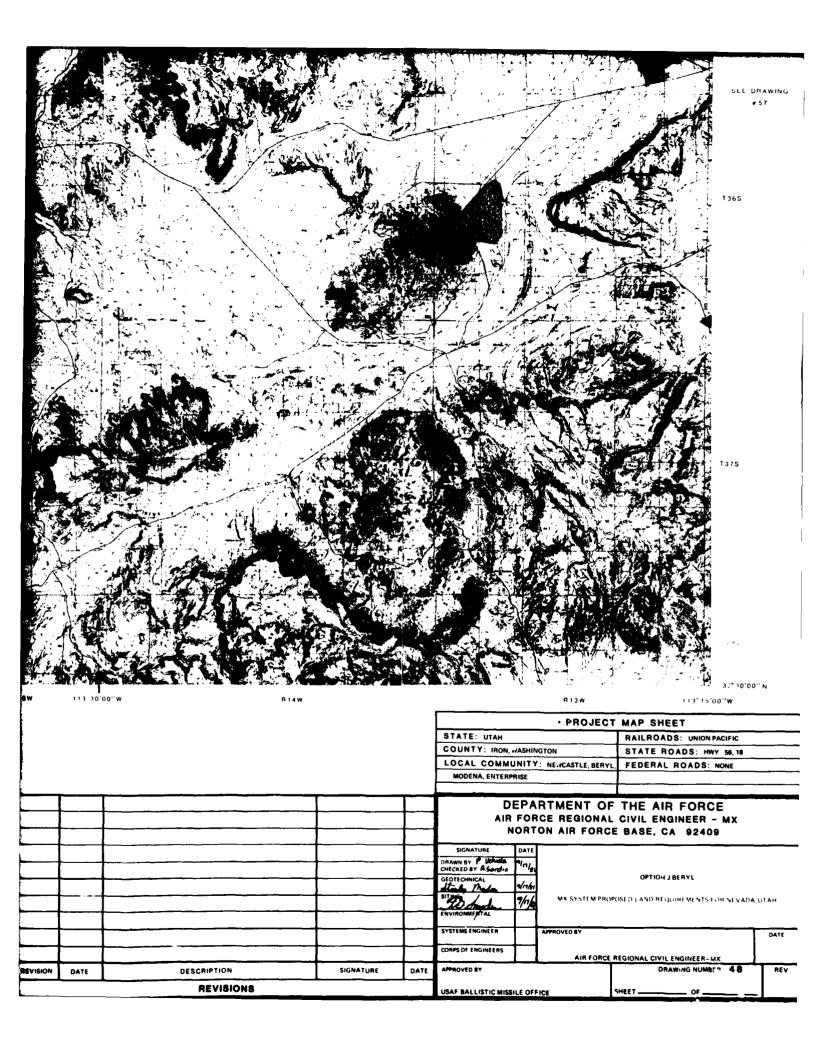


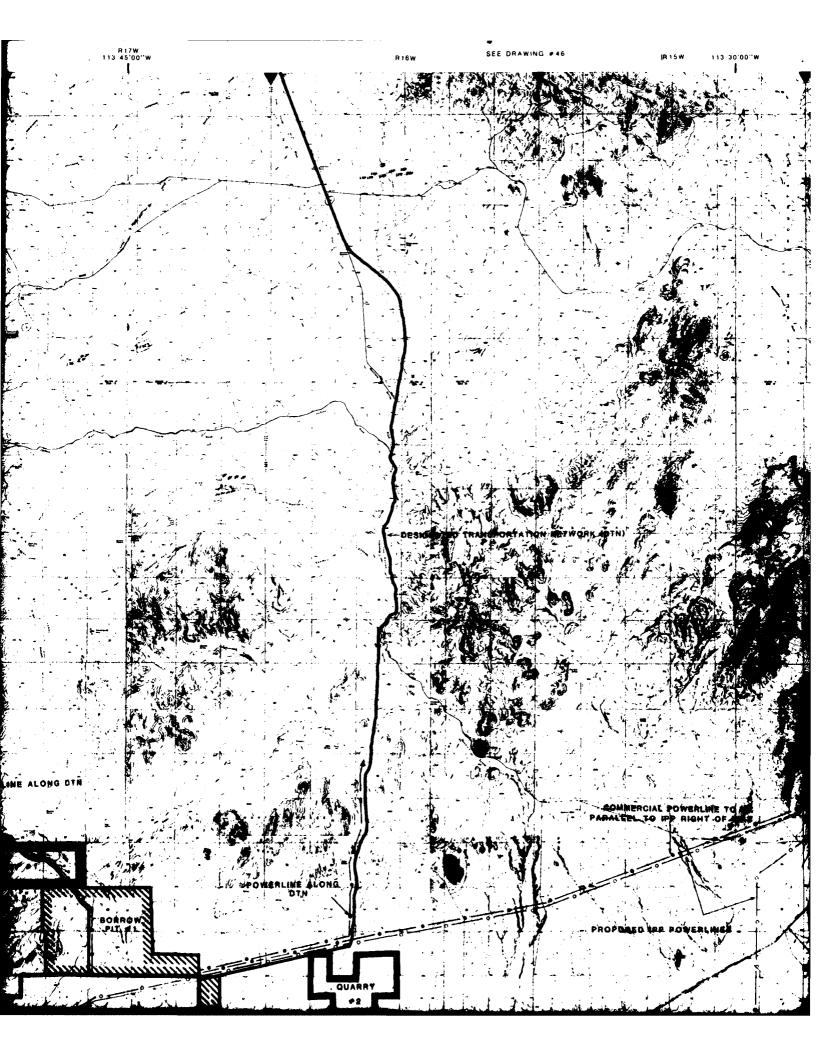


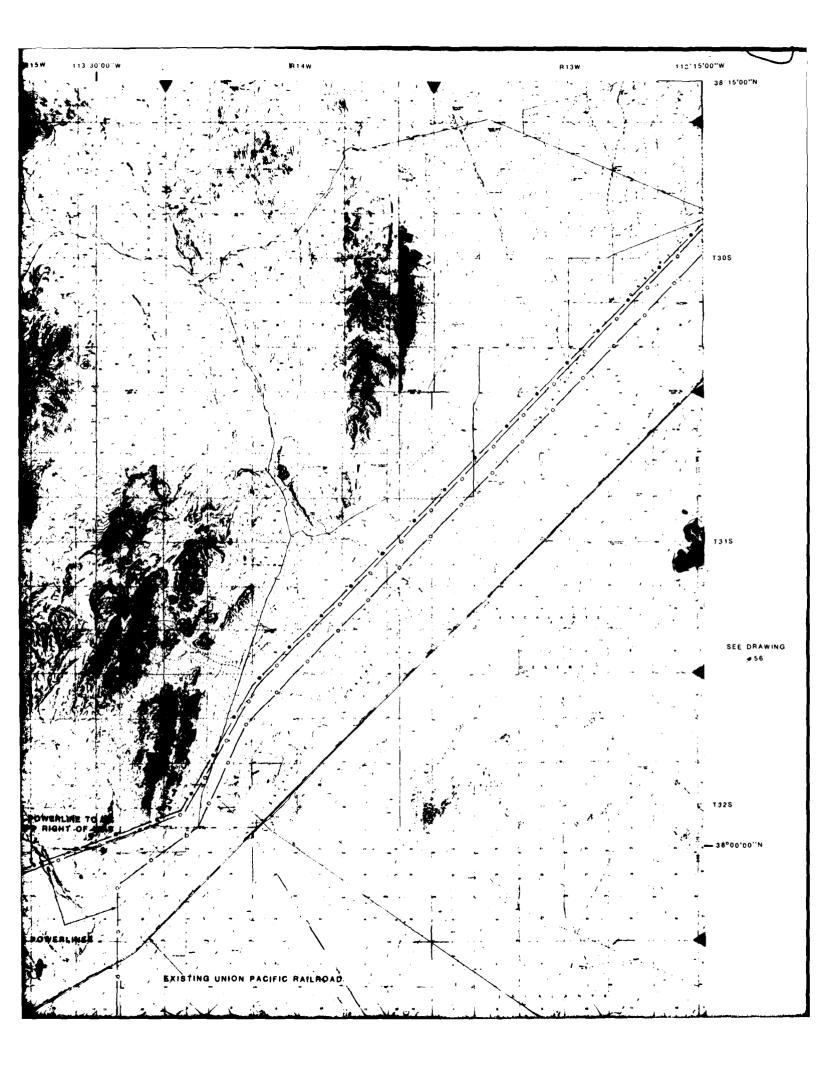


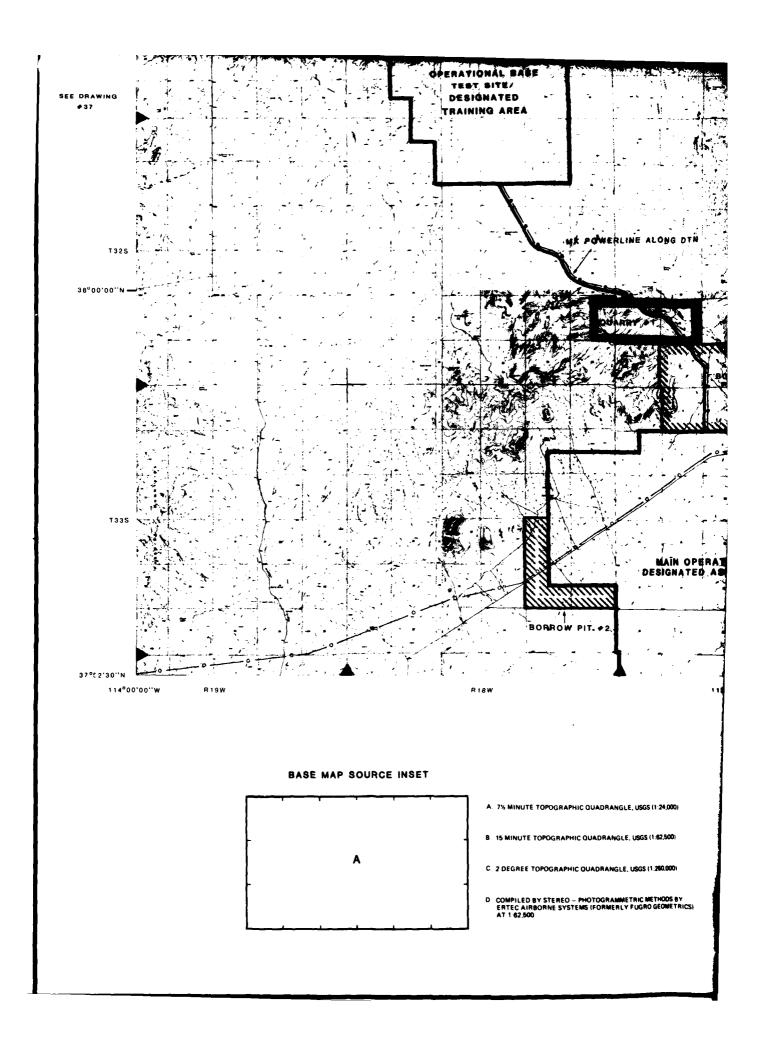


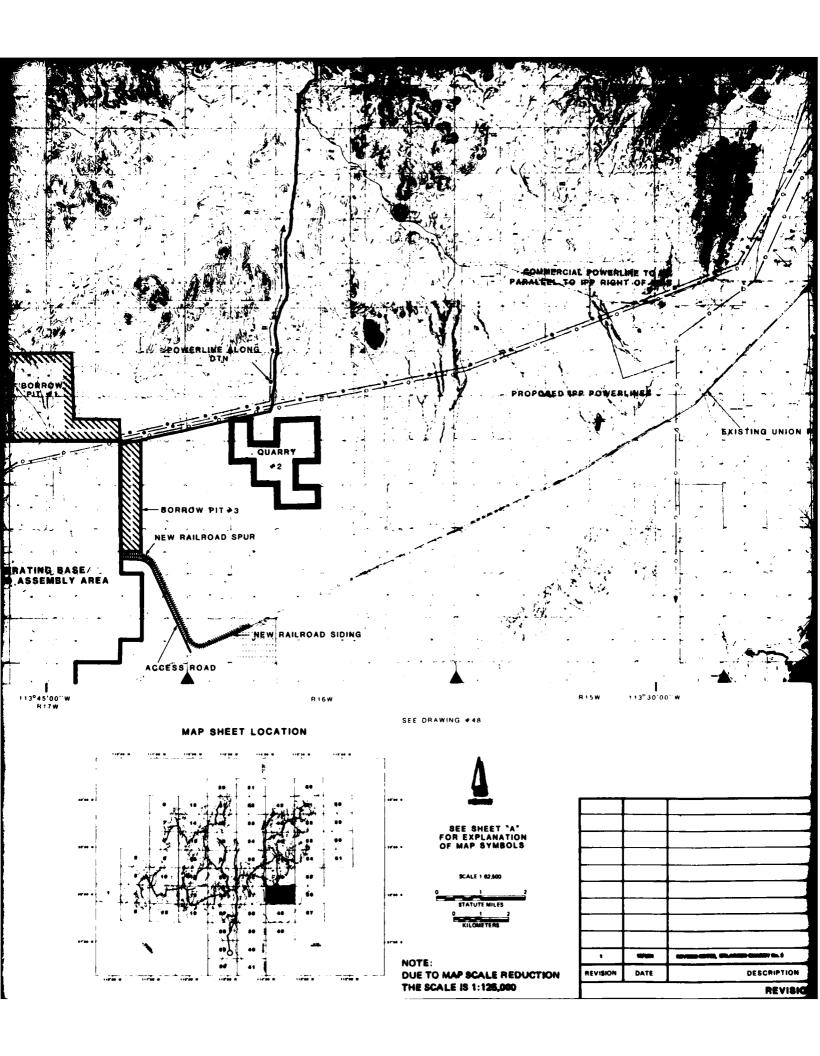


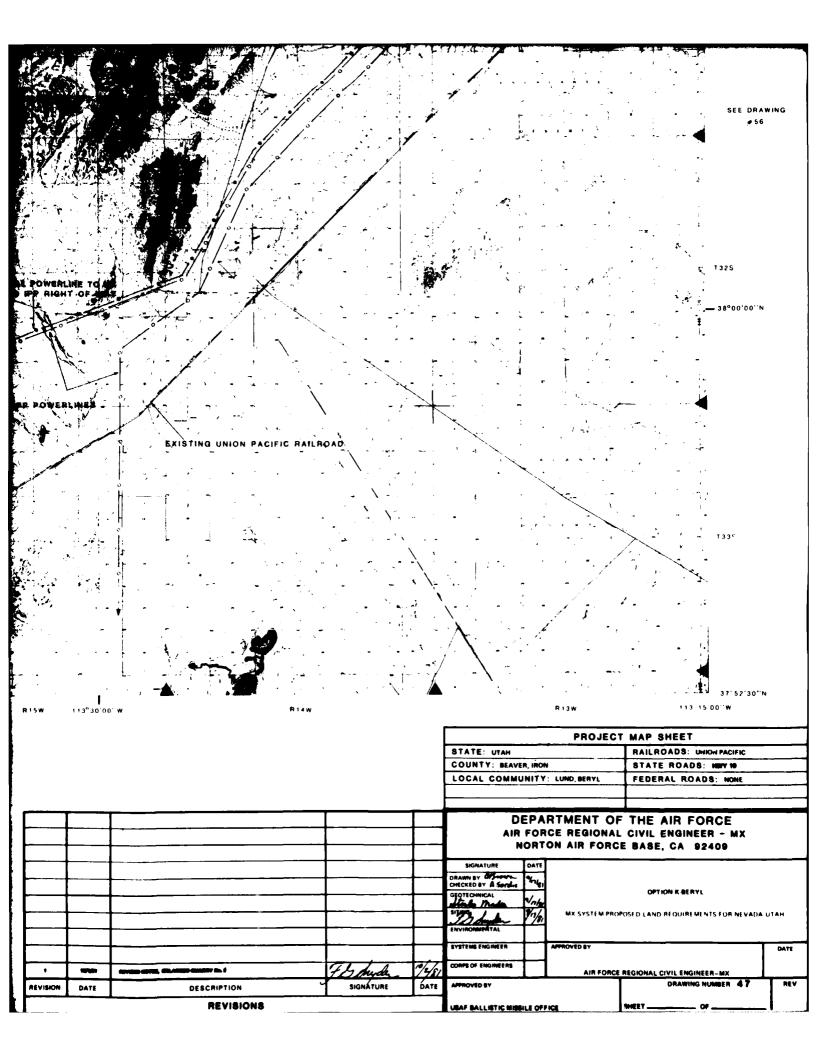


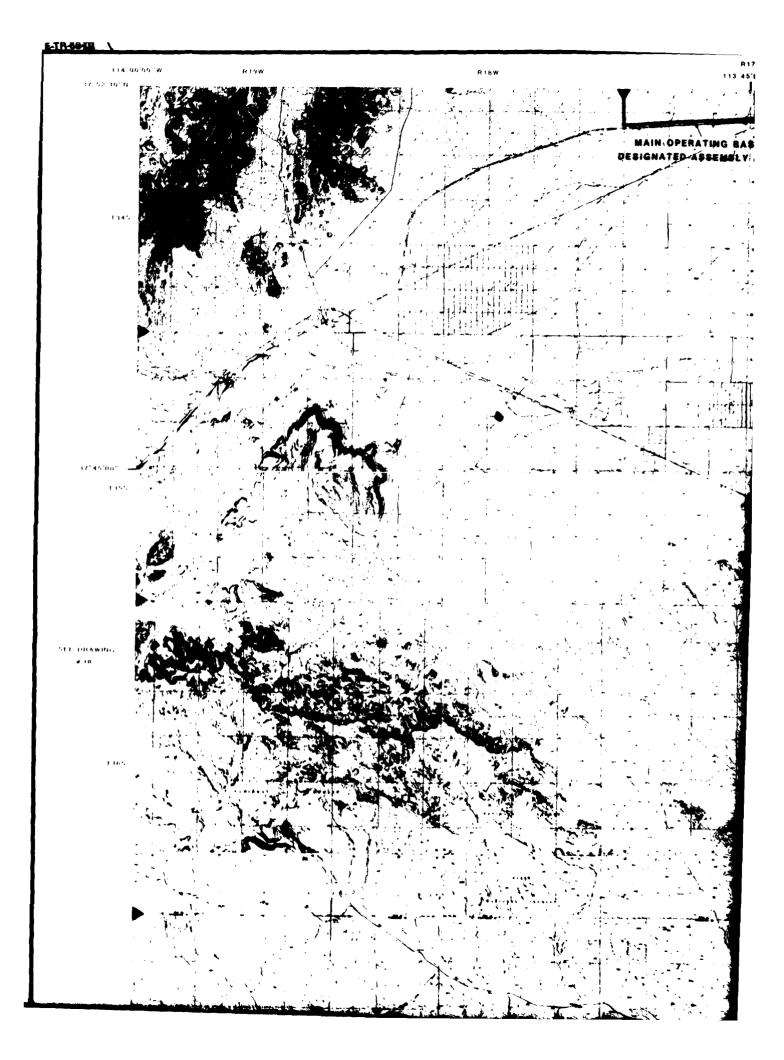


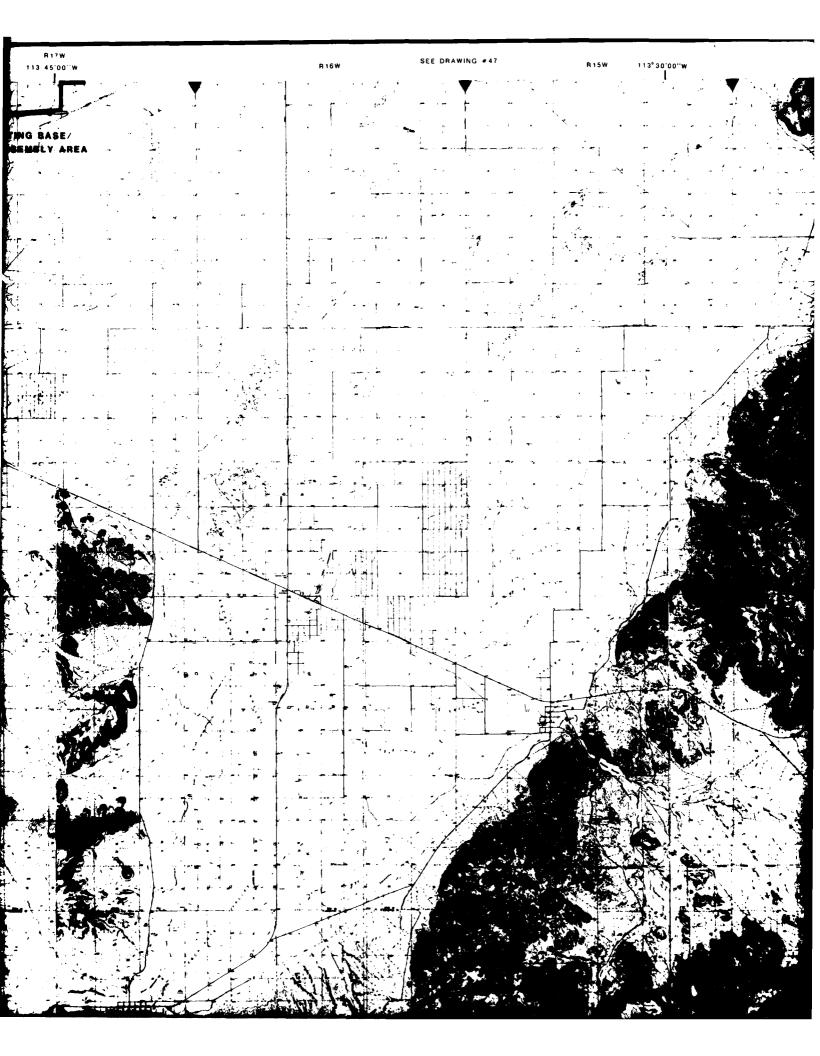


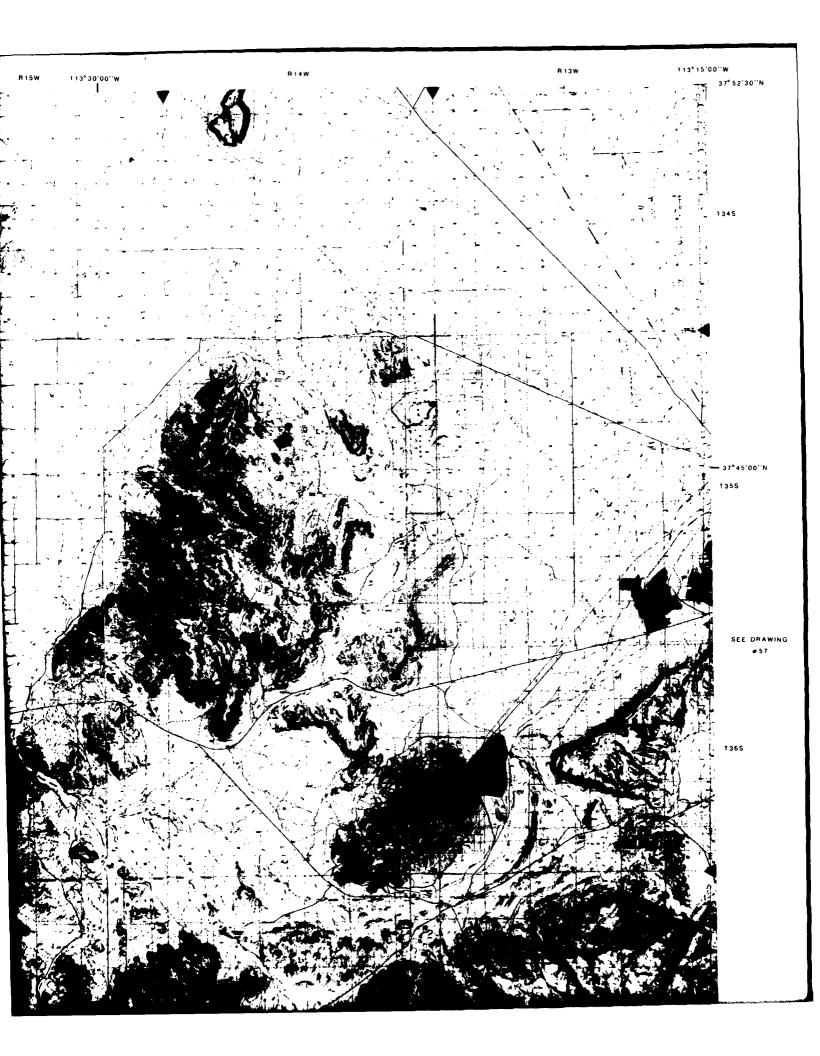


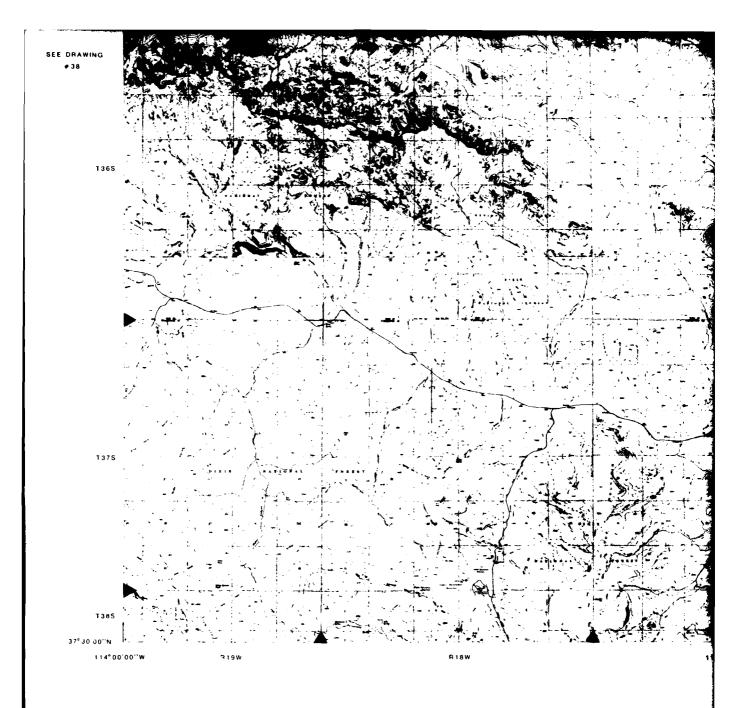




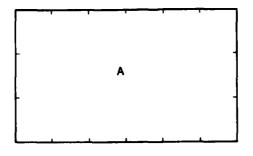




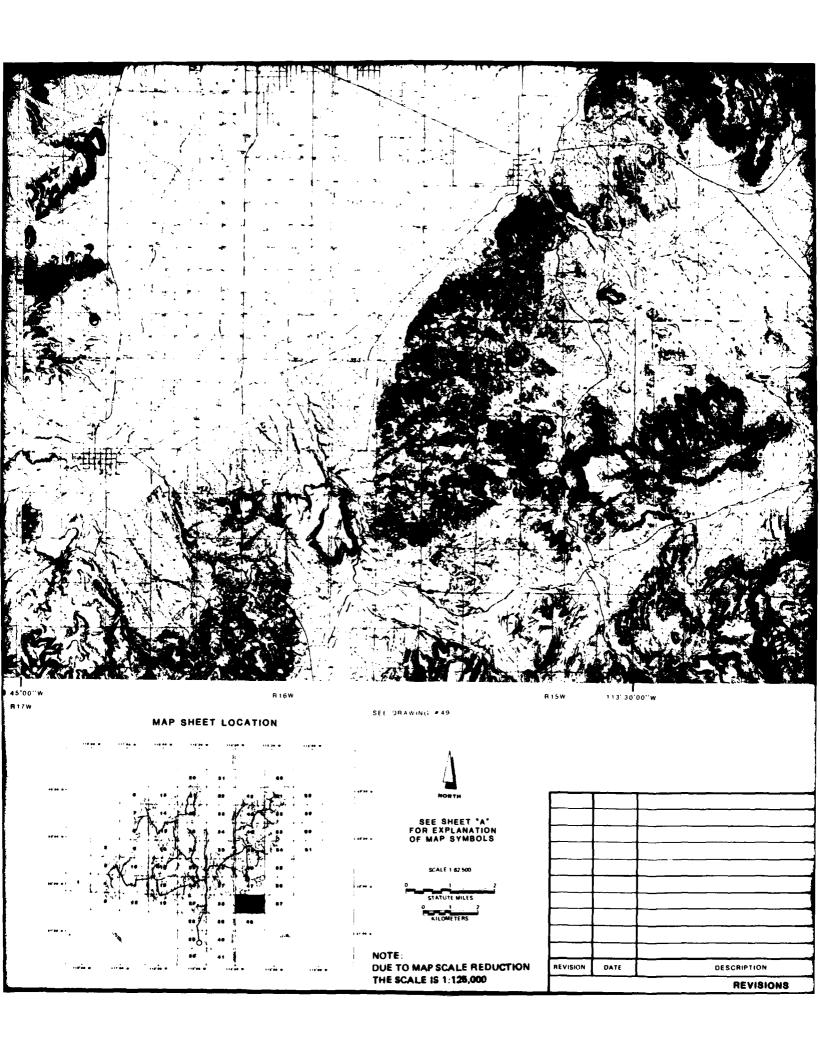


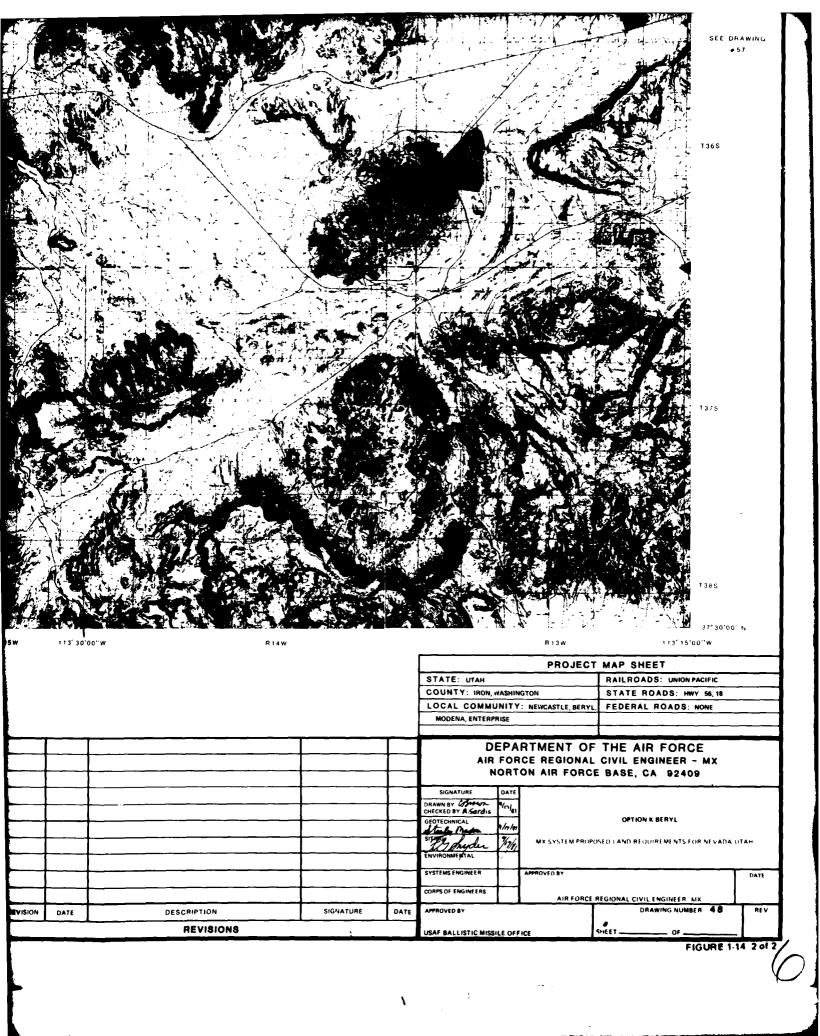


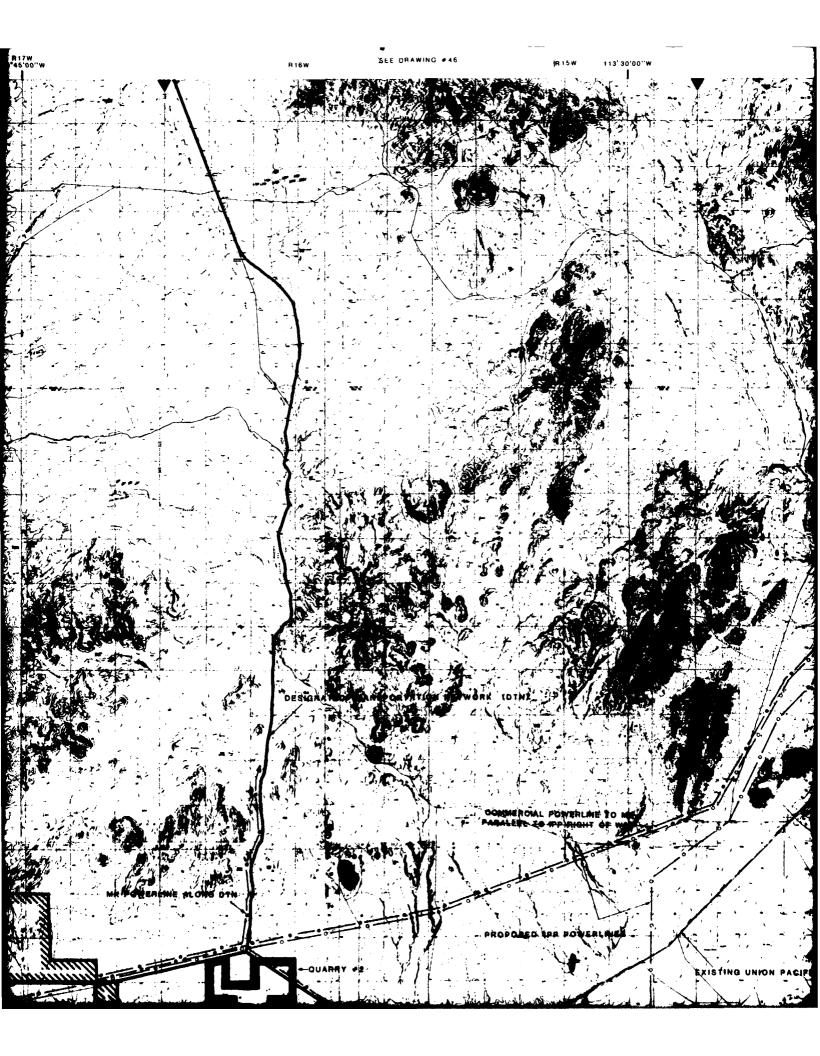


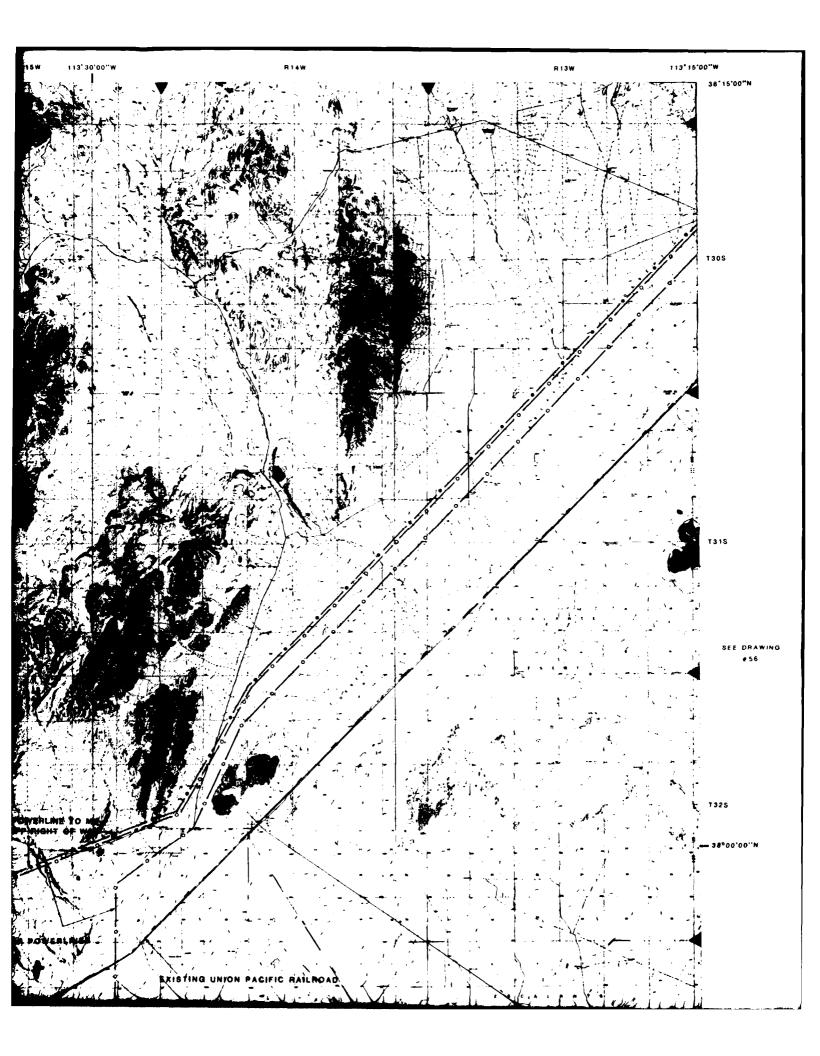


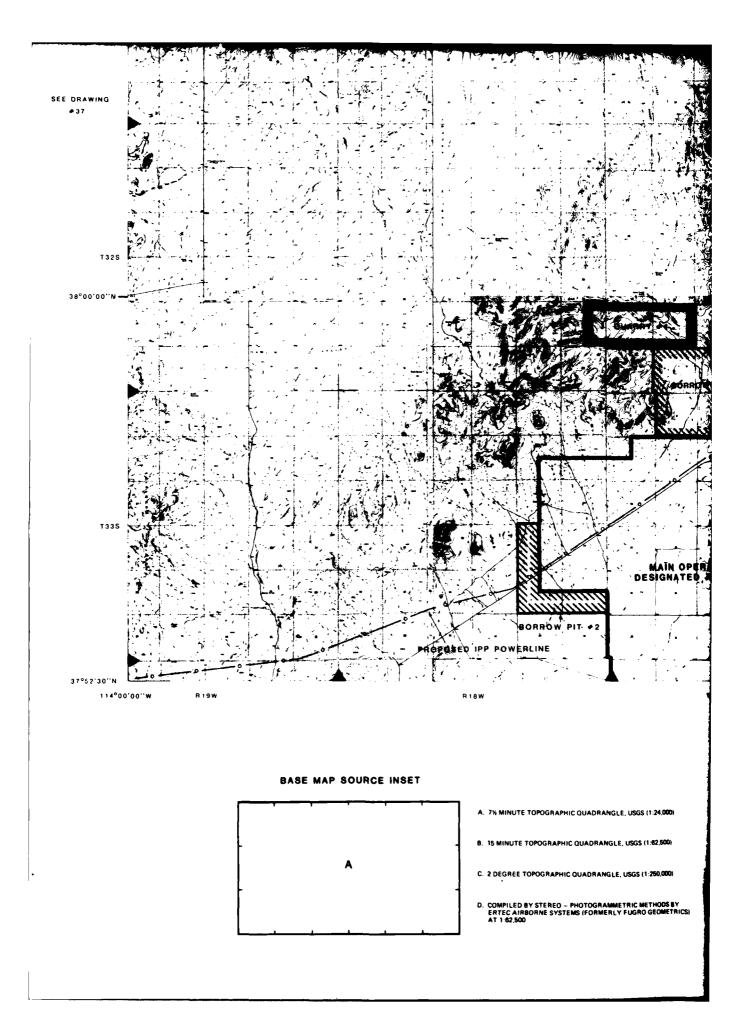
- A. 7% MINUTE TOPOGRAPHIC QUADRANGLE, USGS (1:24,000)
- B. 15 MINUTE TOPOGRAPHIC QUADRANGLE, USGS (1:62,500)
- C. 2 DEGREE TOPOGRAPHIC QUADRANGLE, USGS (1:250,000)
- D COMPILED BY STEREO PHOTOGRAMMETRIC METHODS BY ERTEC AIRBORNE SYSTEMS (FORMERLY FUGRO GEOMETRICS) AT 1.82,500

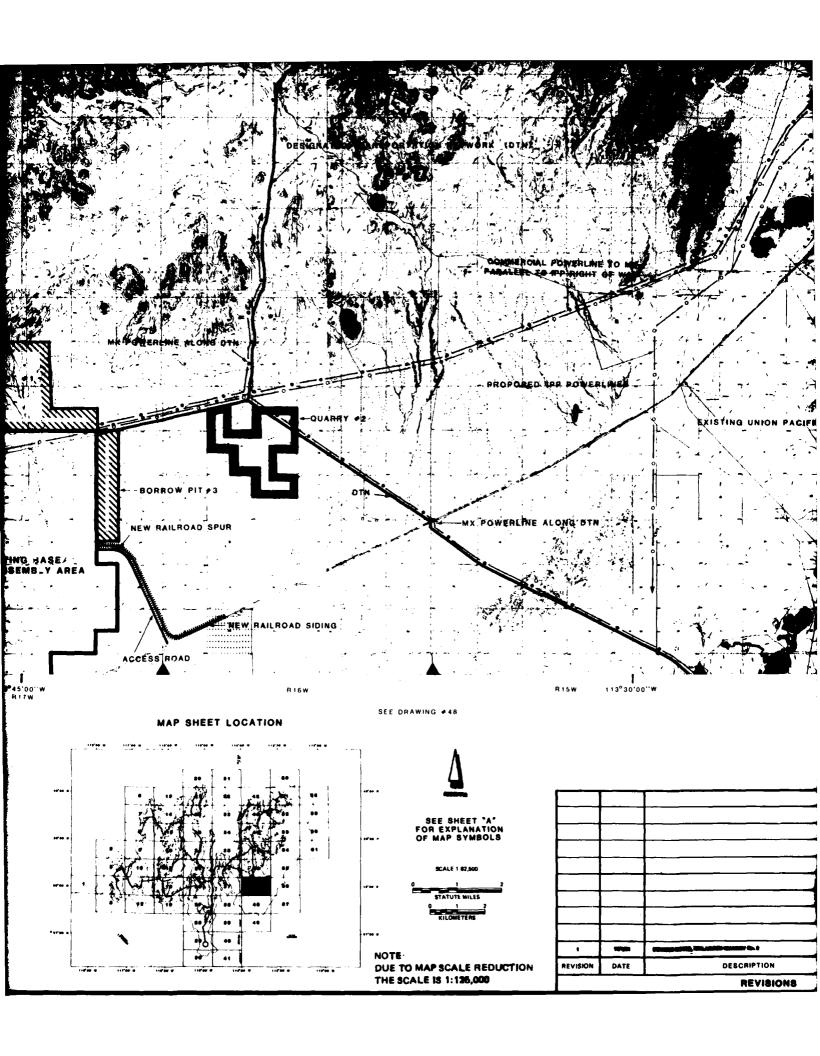


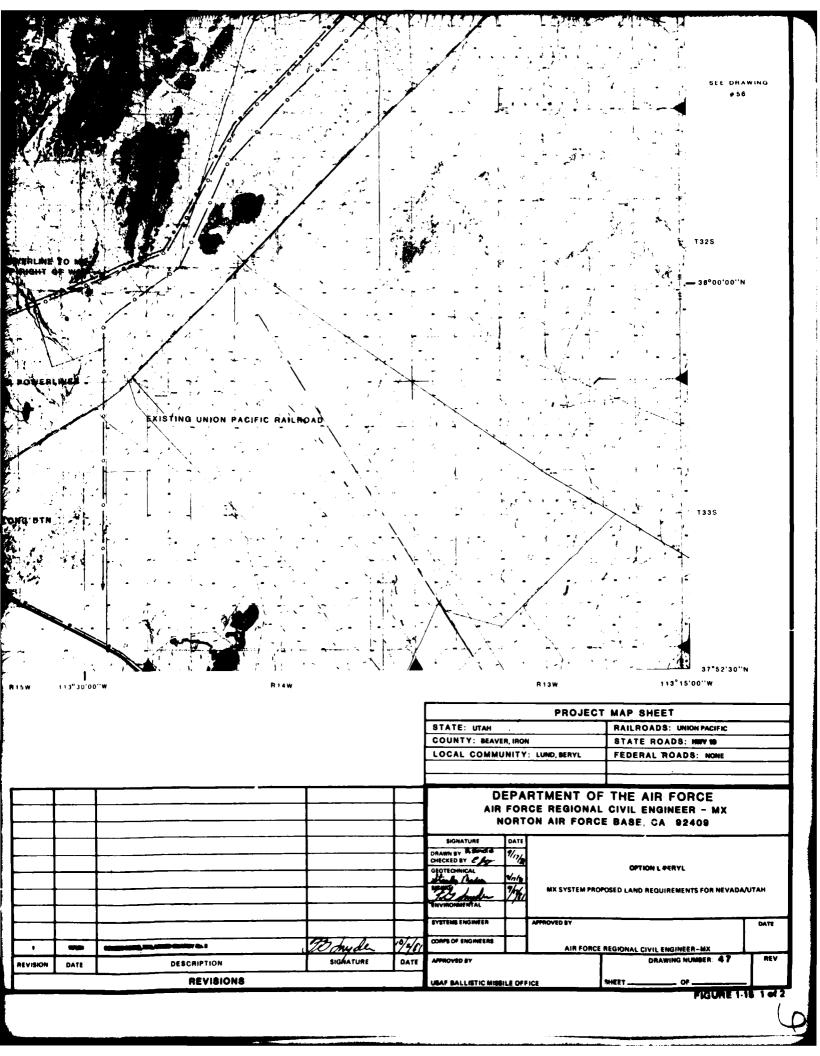


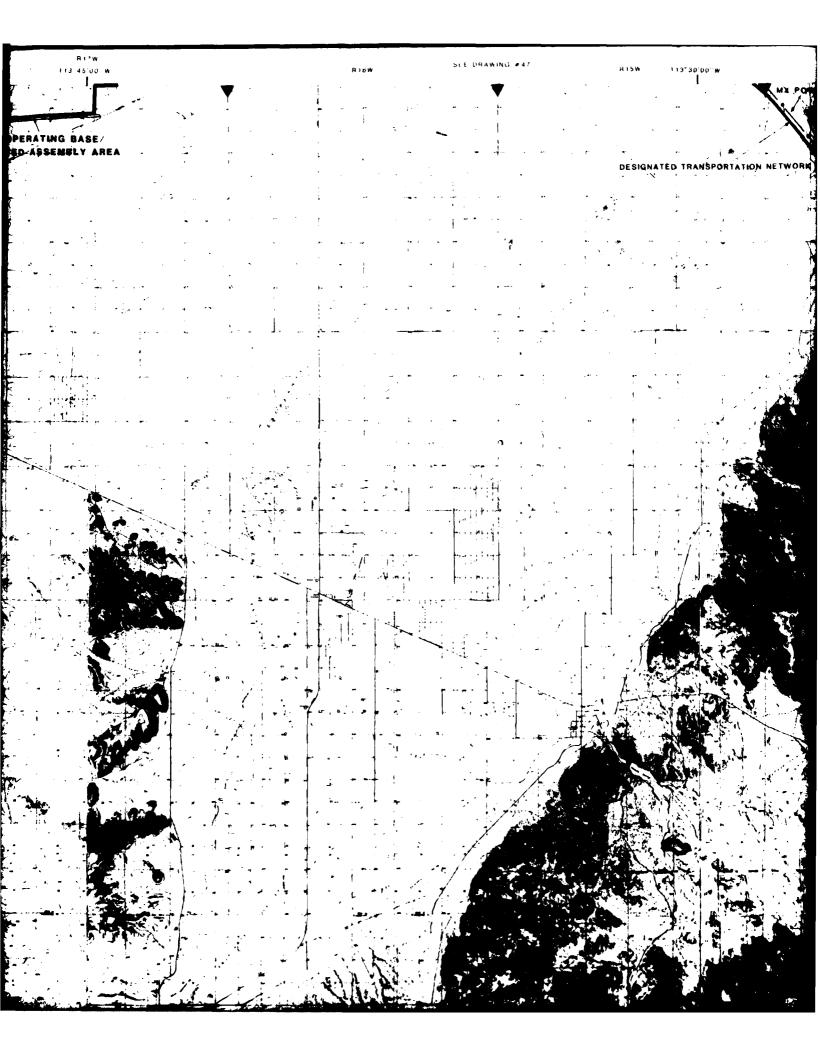


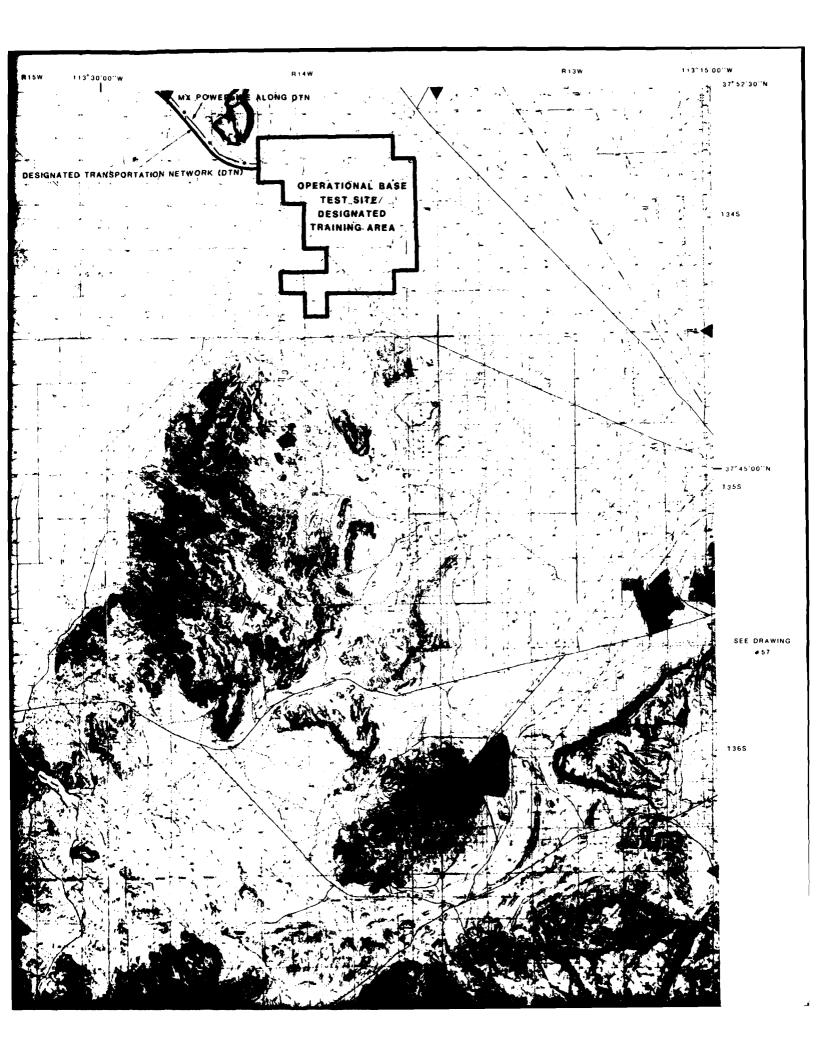


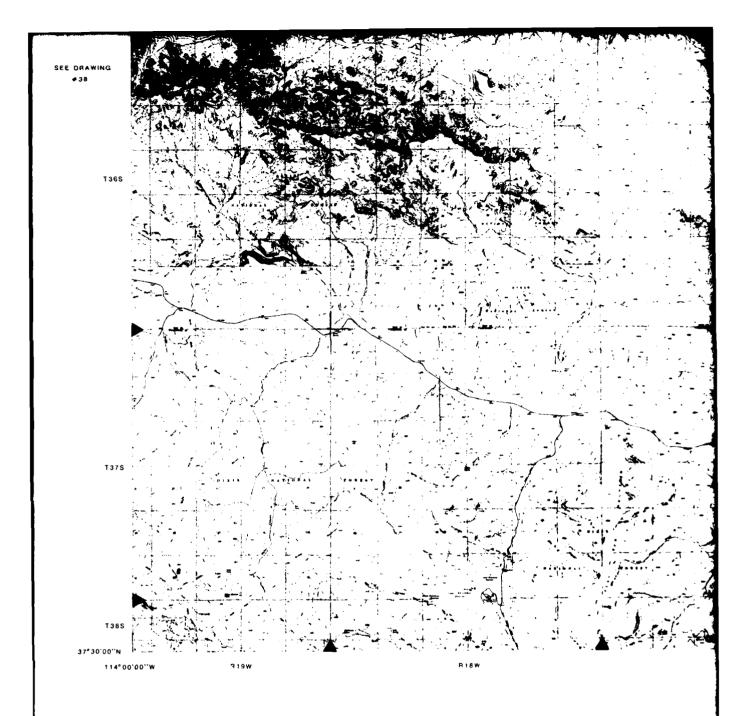




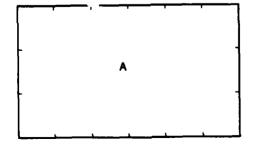




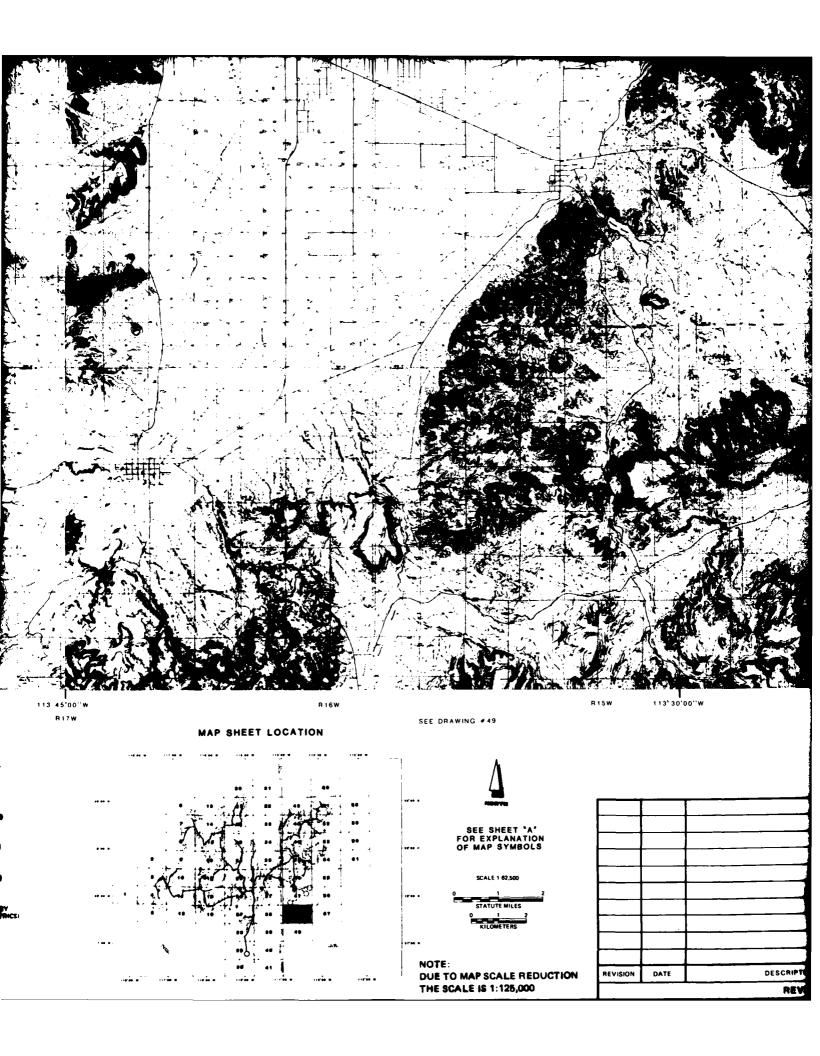


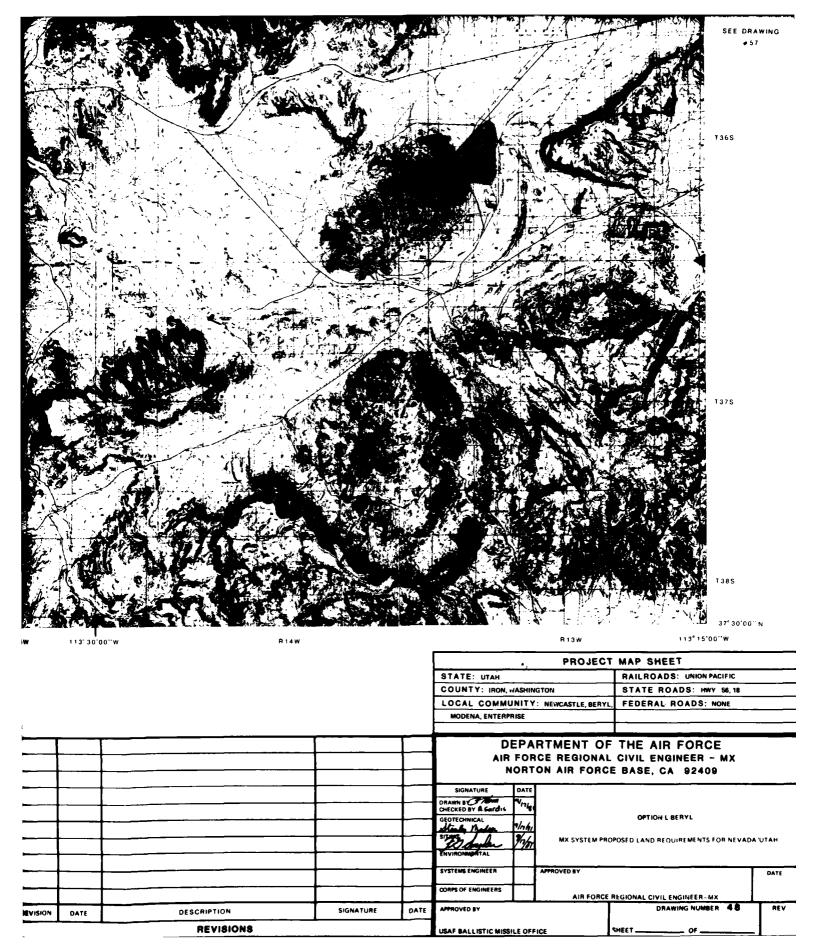


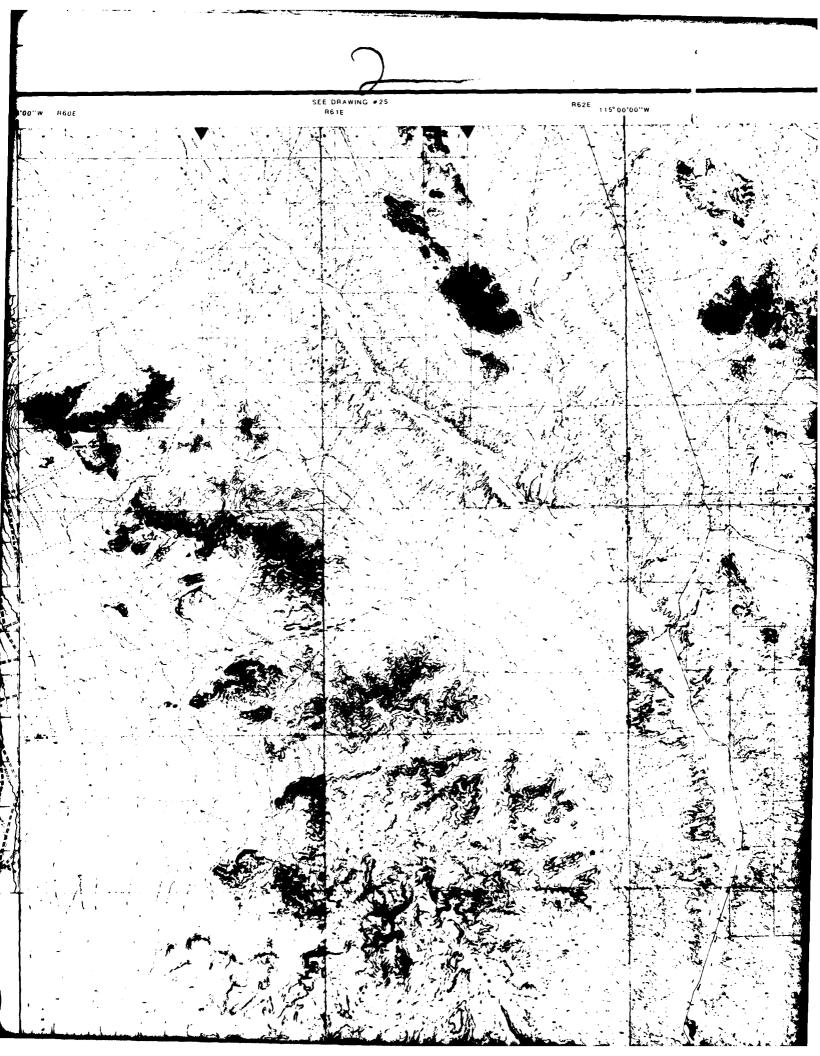
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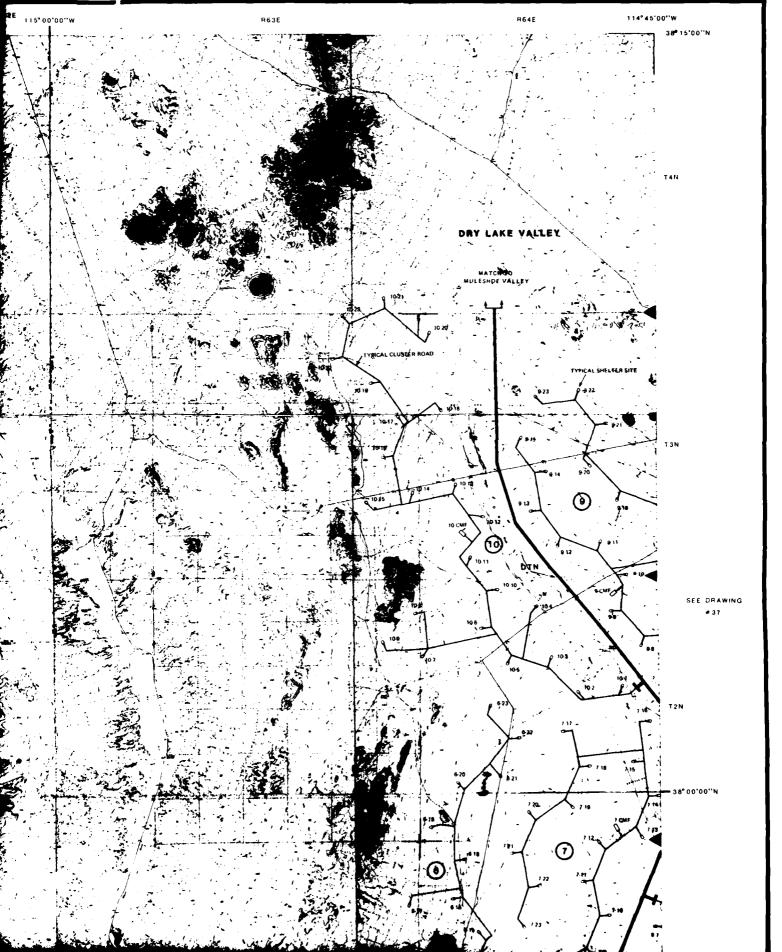


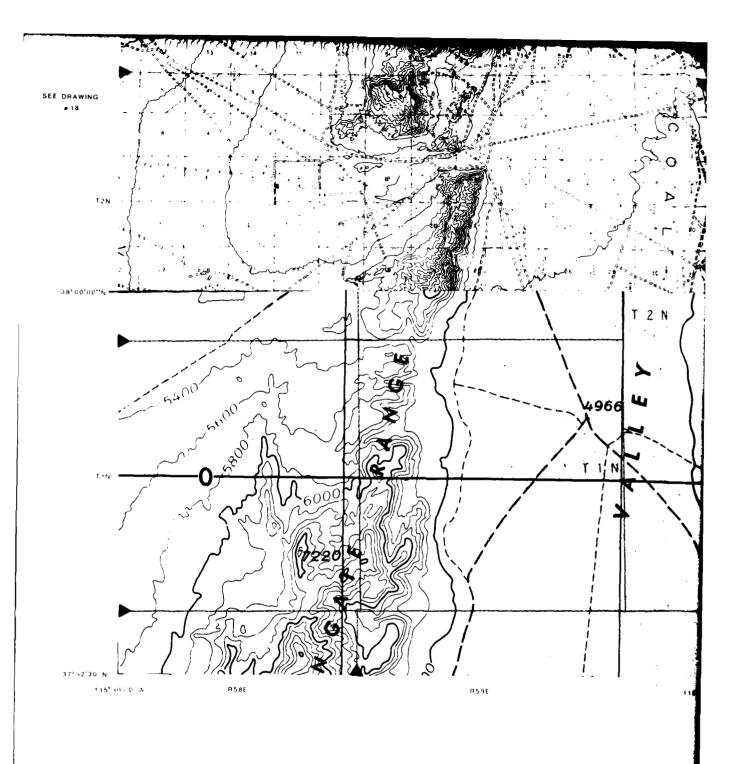
- A 7% MINUTE TOPOGRAPHIC QUADRANGLE USGS (1 24,000)
- 8 15 MINUTE TOPOGRAPHIC QUADRANGLE USGS (1 62:500)
- C. 2 DEGREE TOPOGRAPHIC QUADRANGLE USGS (1 260,000)
- D. COMPILED BY STEREO PHOTOGRAMMETRIC METHODS BY ERTEC AIRBORNE SYSTEMS (FORMERLY FUGRO GEOMETRICS) AT 1 82,500



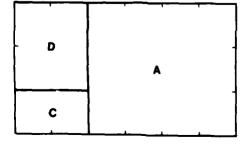




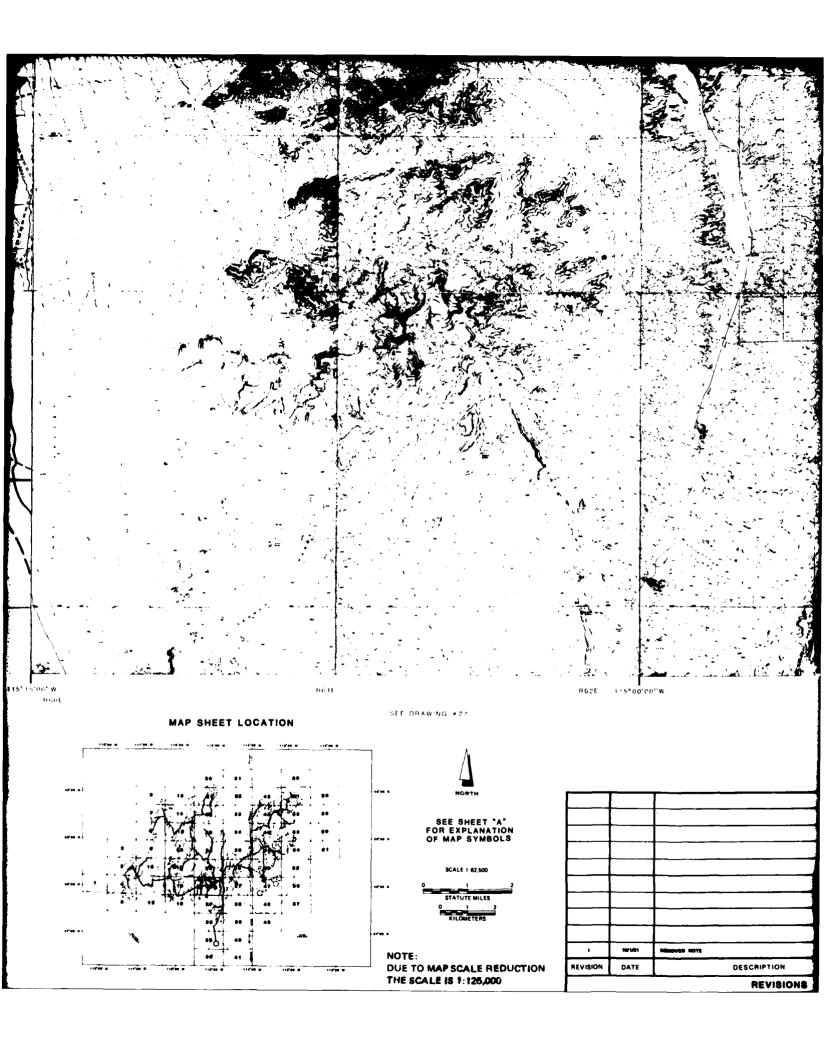


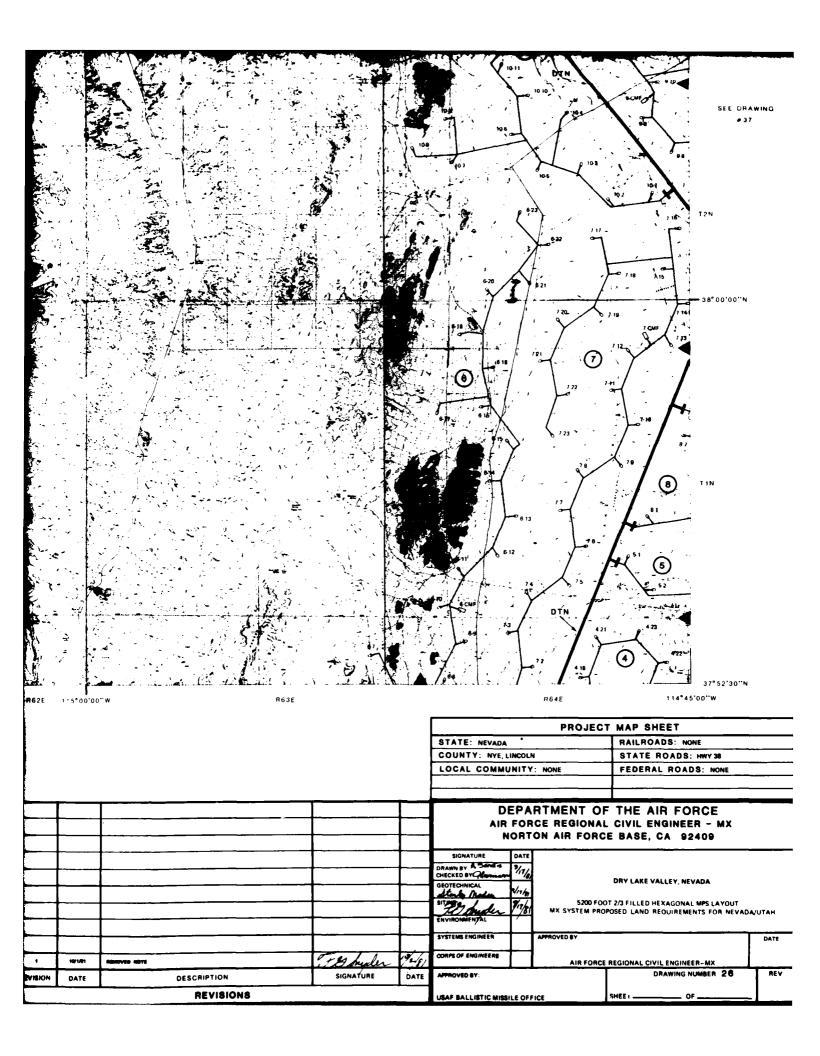


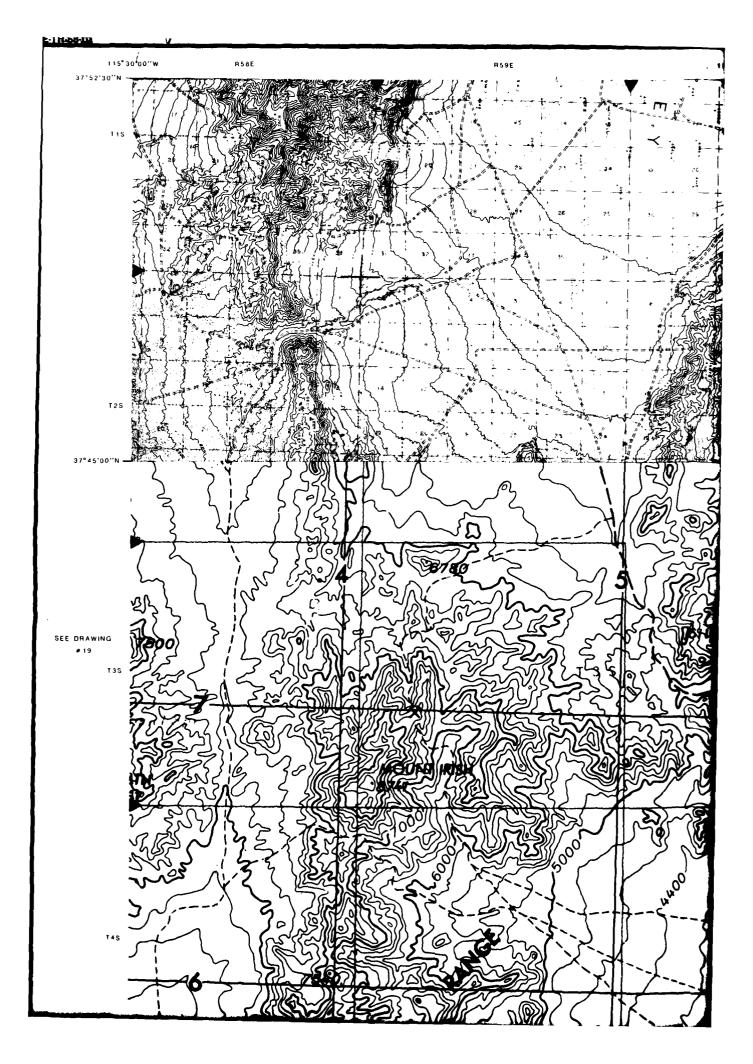
## BASE MAP SOURCE INSET

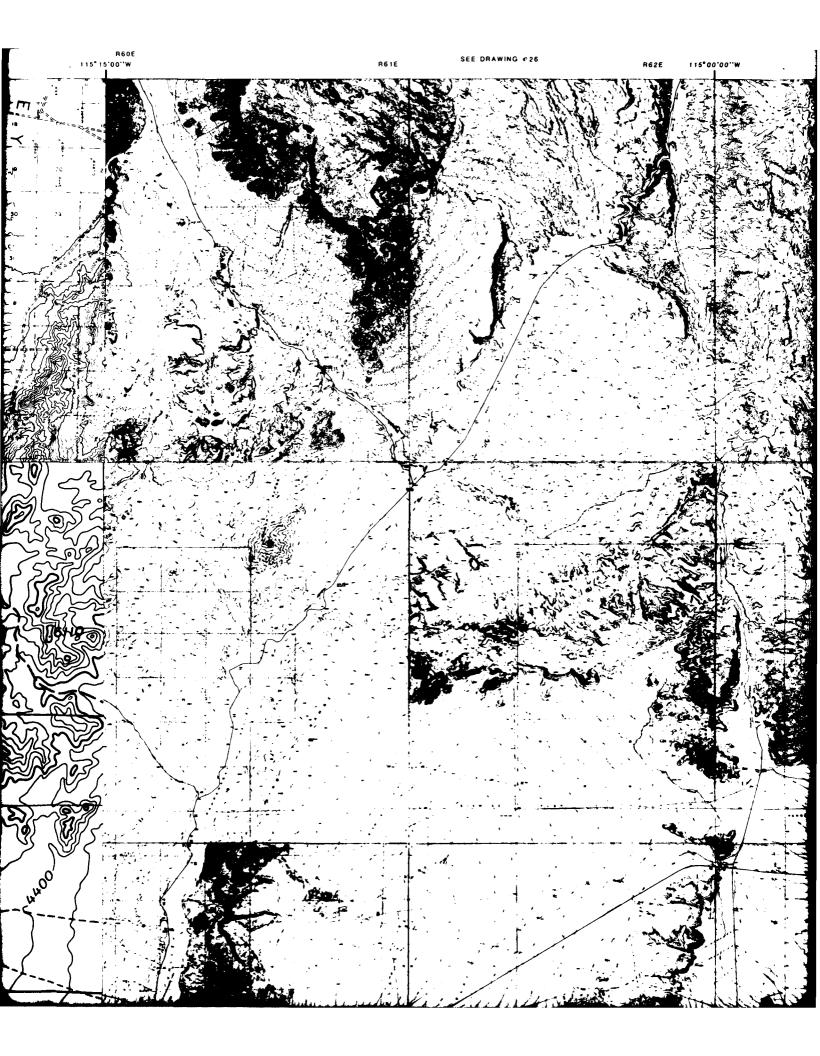


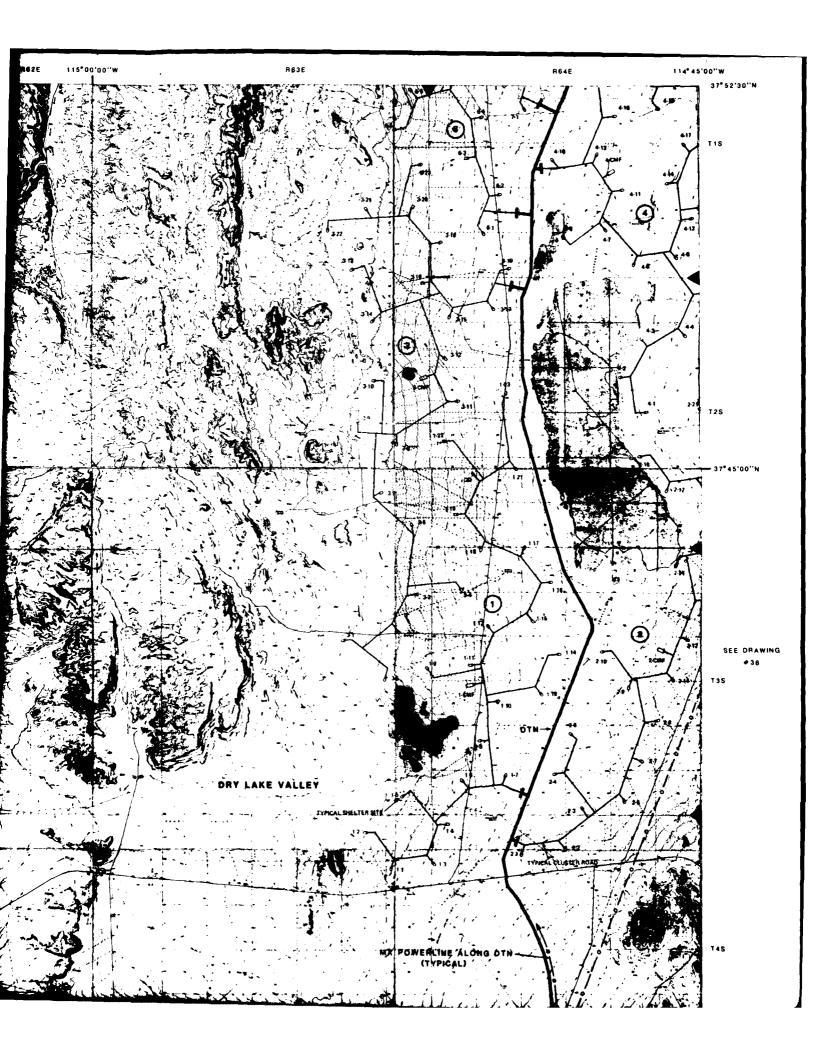
- A 7% MINUTE TOPOGRAPHIC QUADRANGLE, USGS (1:24,000)
- 8 15 MINUTE TOPOGRAPHIC QUADRANGLE, USGS (1:62:500)
- C 2 DEGREE TOPOGRAPHIC QUADRANGLE, USGS (1.250,000)
- D COMPILED BY STEREO PHOTOGRAMMETRIC METHODS BY ERTEC AIRBORNE SYSTEMS (FORMERLY FUGRO GEOMETROS) AT 1 62,500

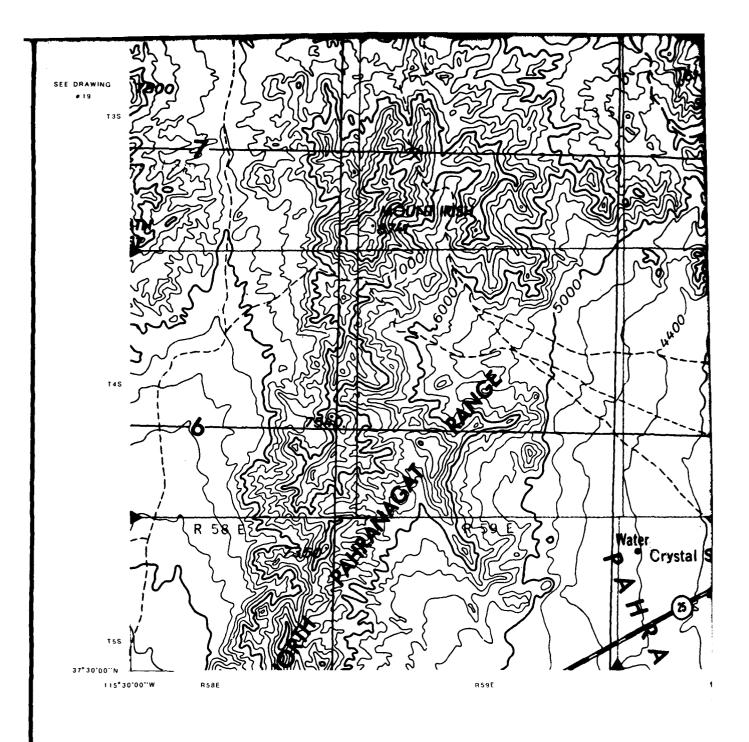




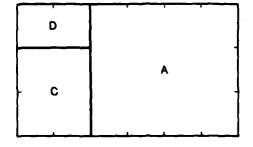




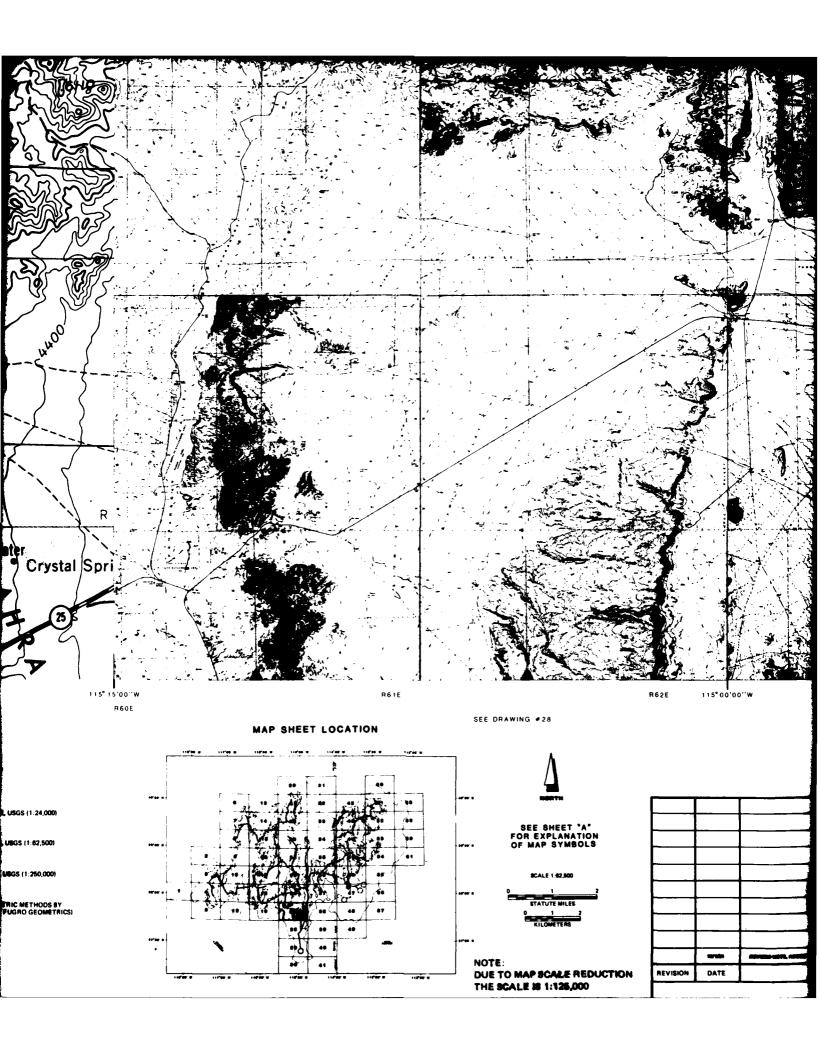


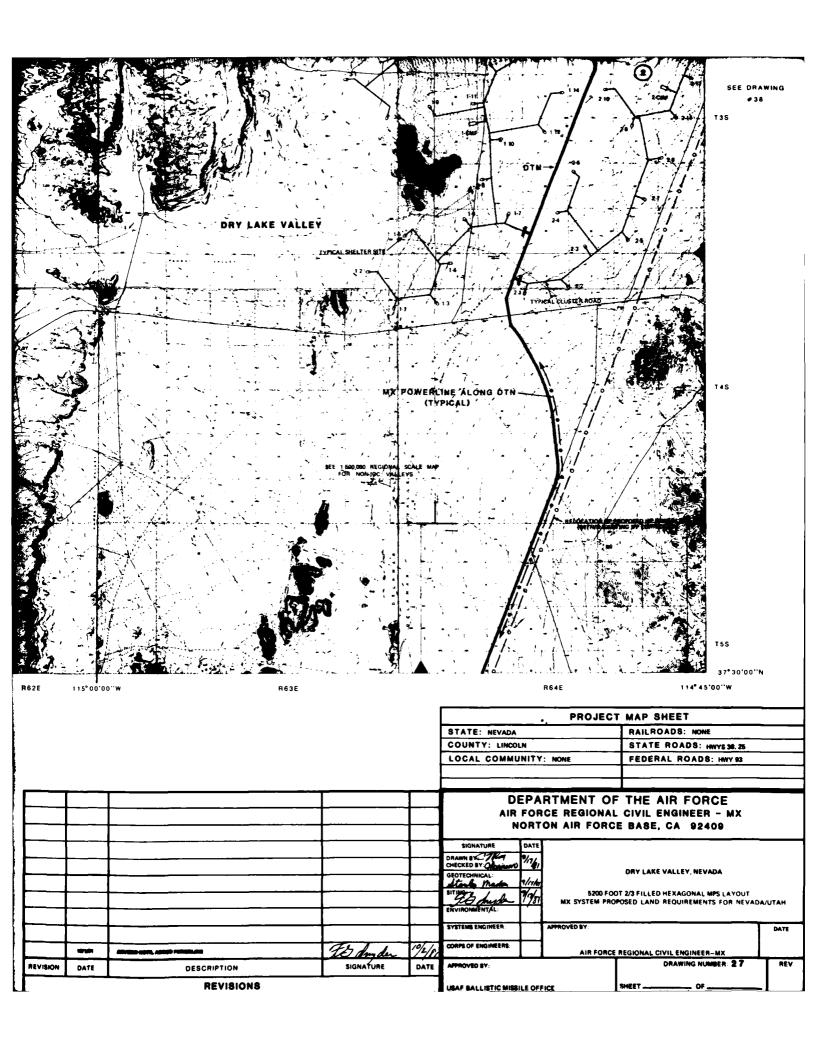


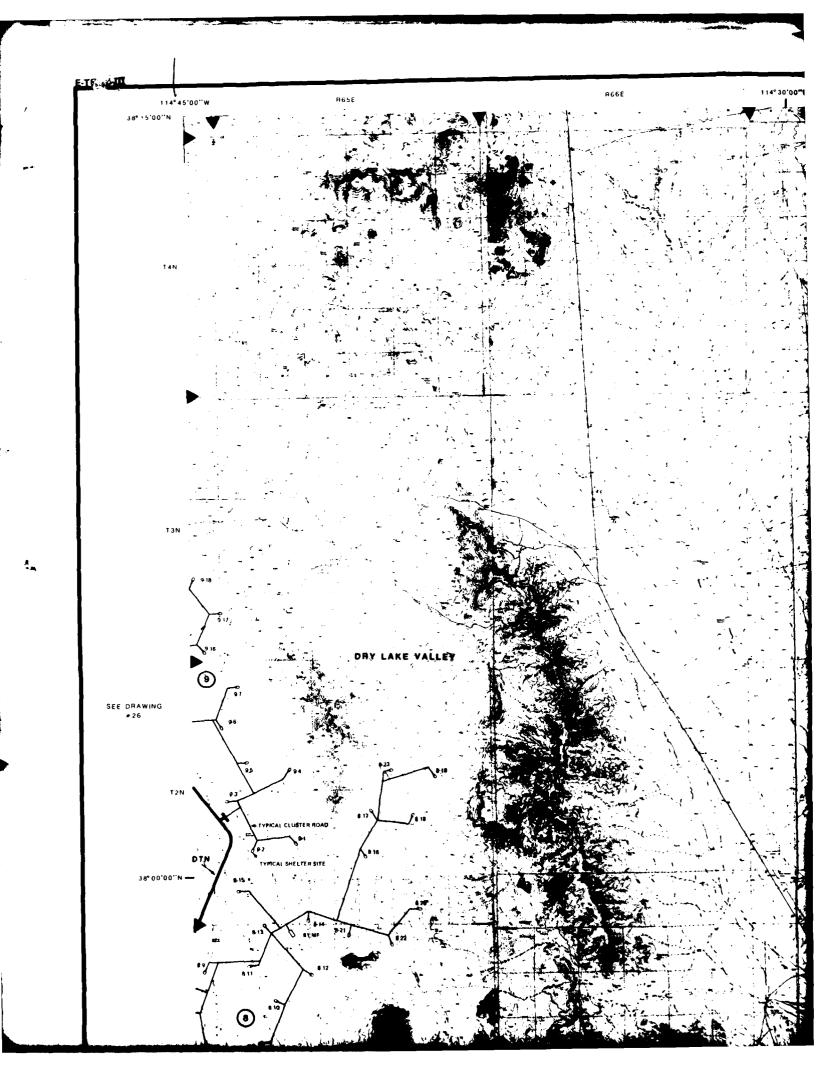
## BASE MAP SOURCE INSET



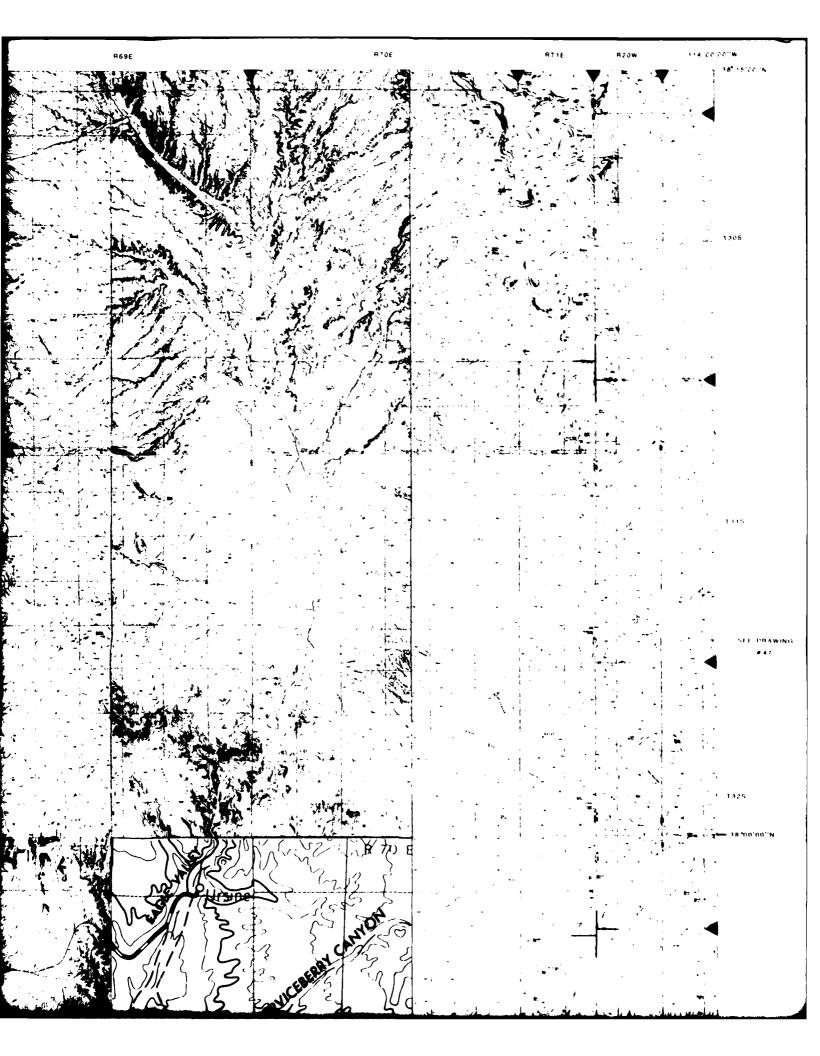
- A. 7% MINUTE TOPOGRAPHIC QUADRANGLE, USGS (1:24,000)
- B. 15 MINUTE TOPOGRAPHIC QUADRANGLE, USGS (1:62,500)
- C. 2 DEGREE TOPOGRAPHIC QUADRANGLE, USGS (1:250,000)
- D. COMPILED BY STEREO PHOTOGRAMMETRIC METHODS BY ERTEC AIRBORNE SYSTEMS (FORMERLY FUGRO GEOMETRICS) AT 1:62,500

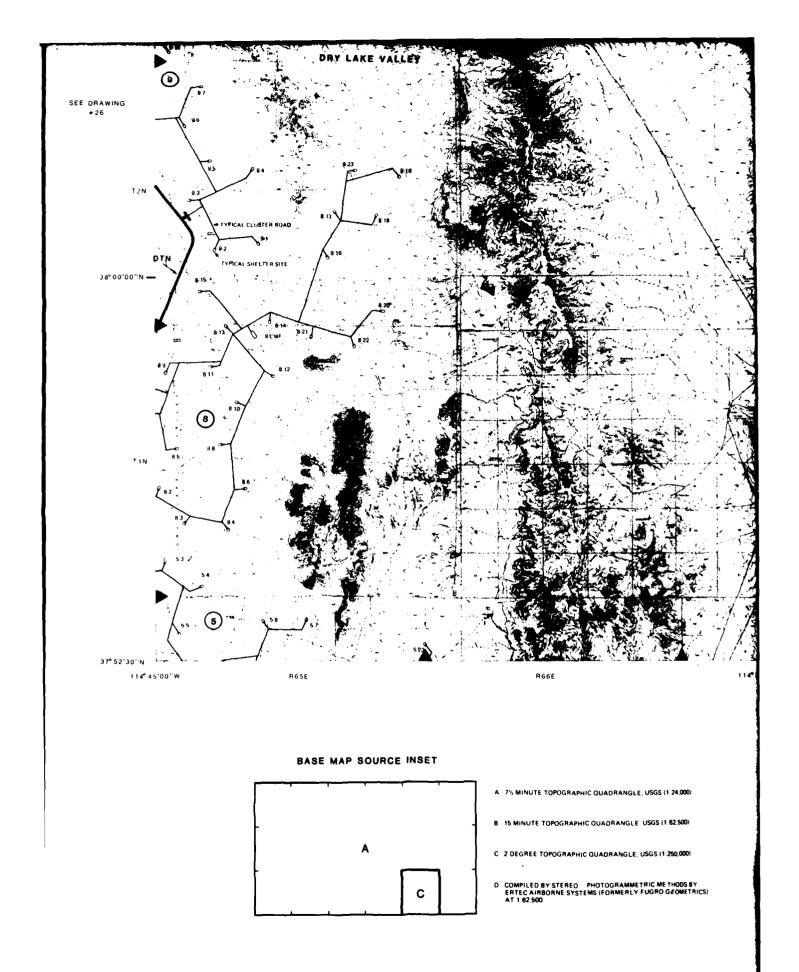


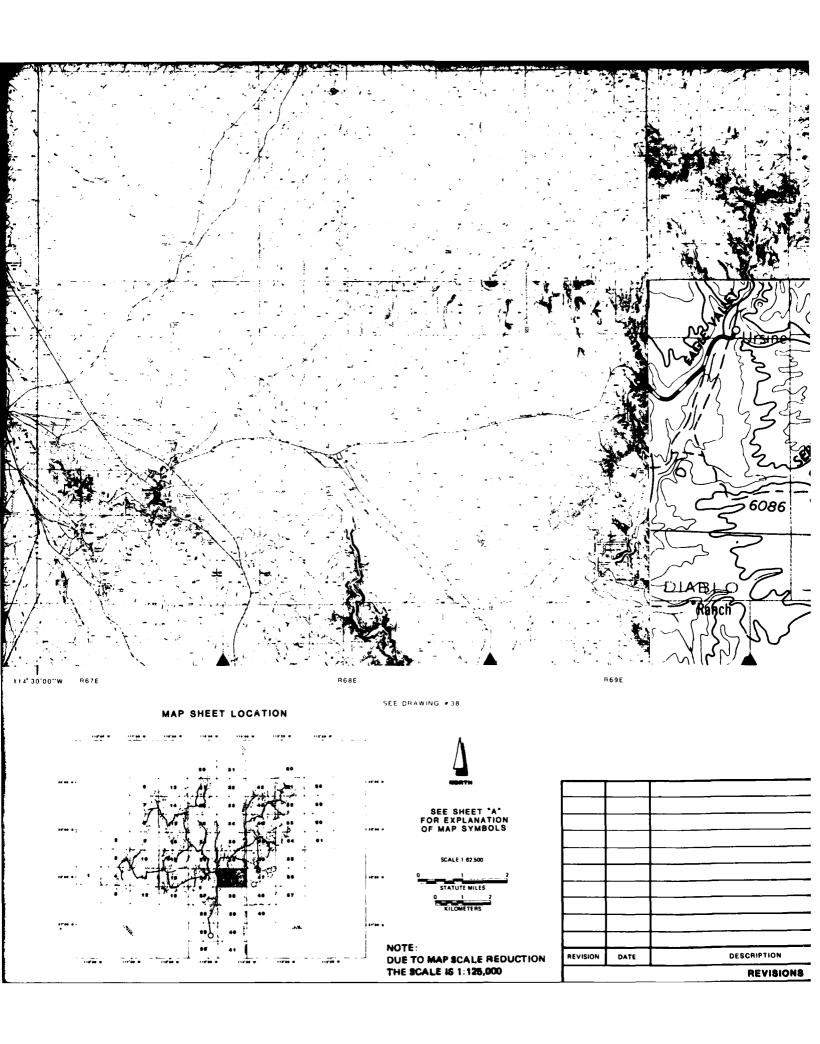


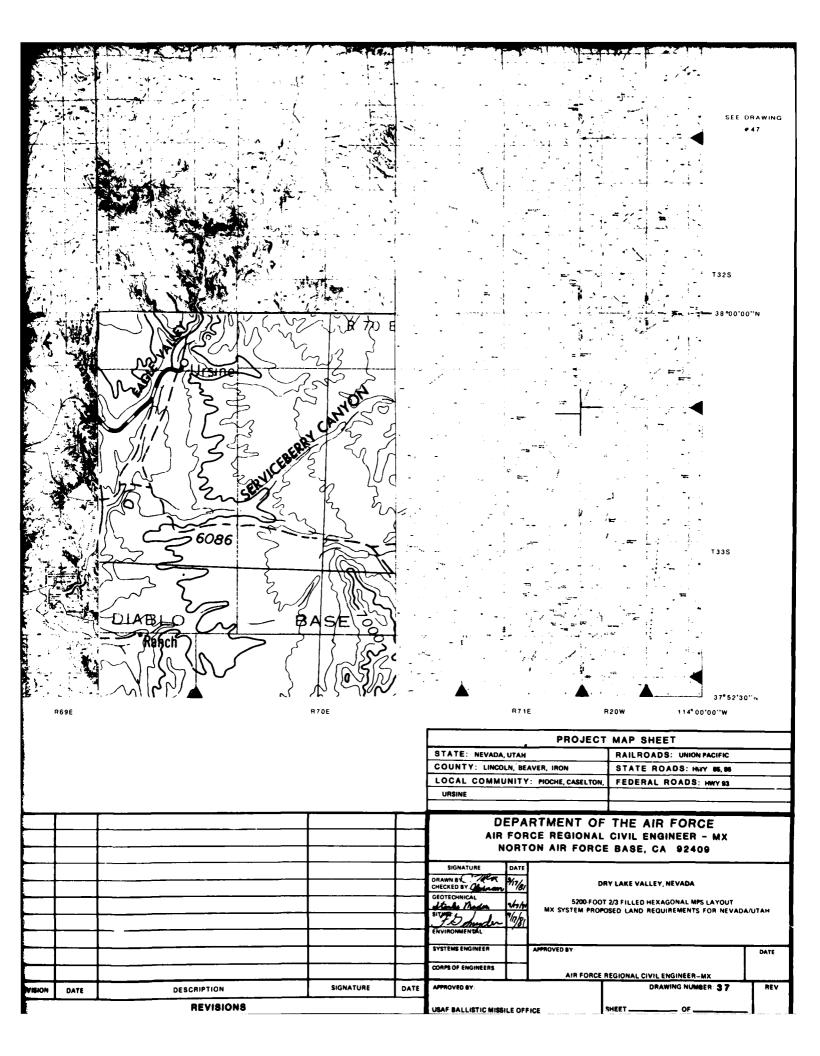




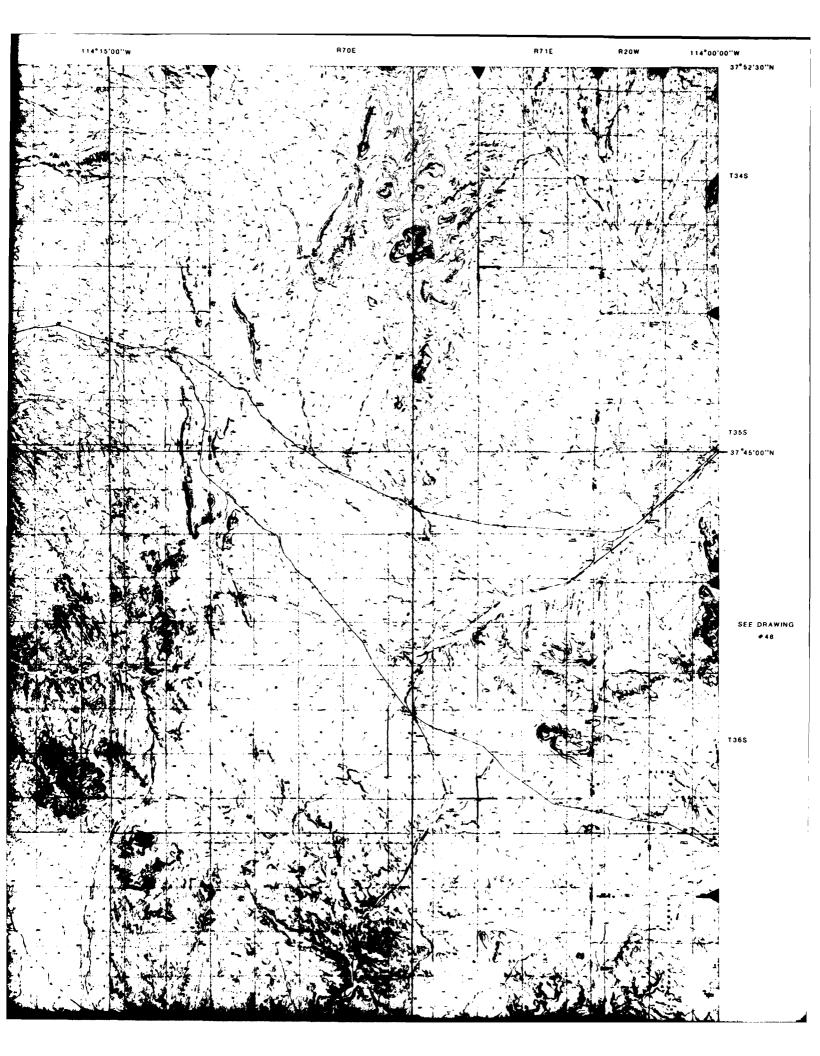


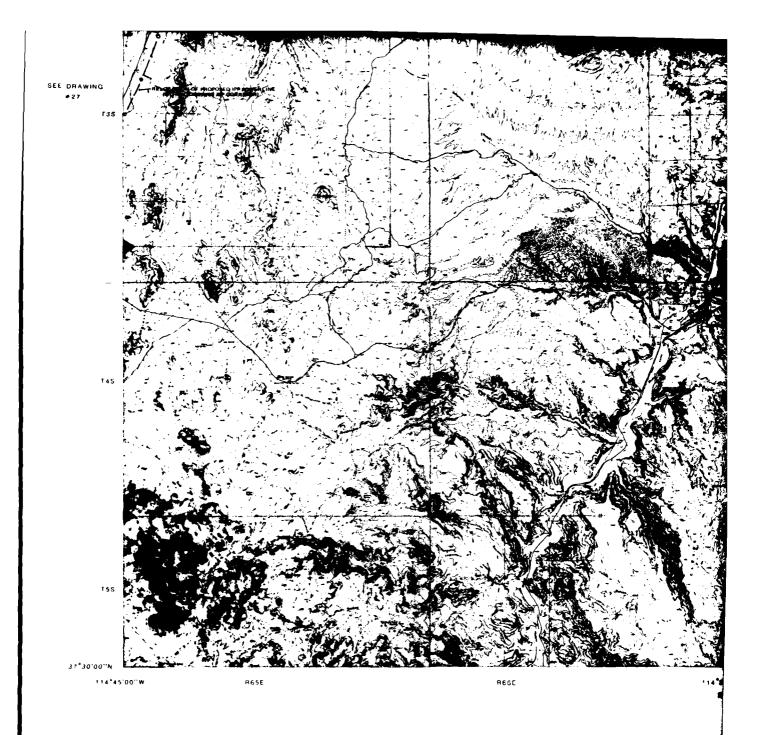


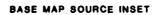


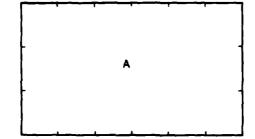




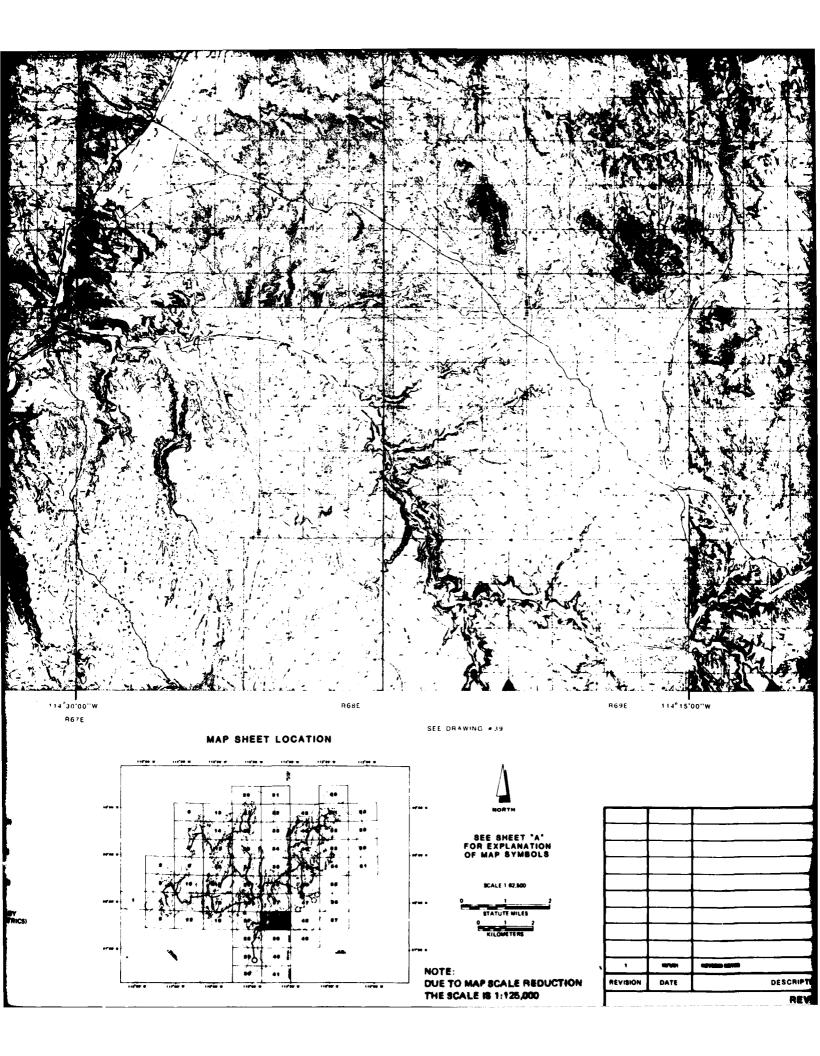


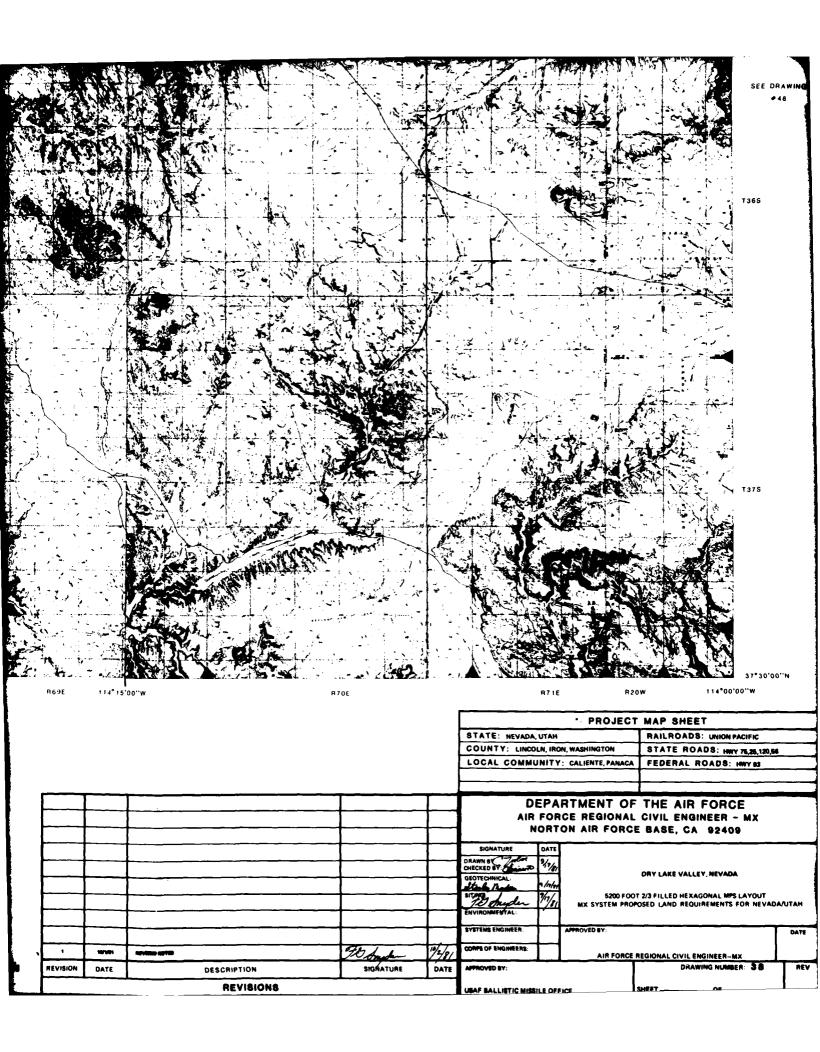


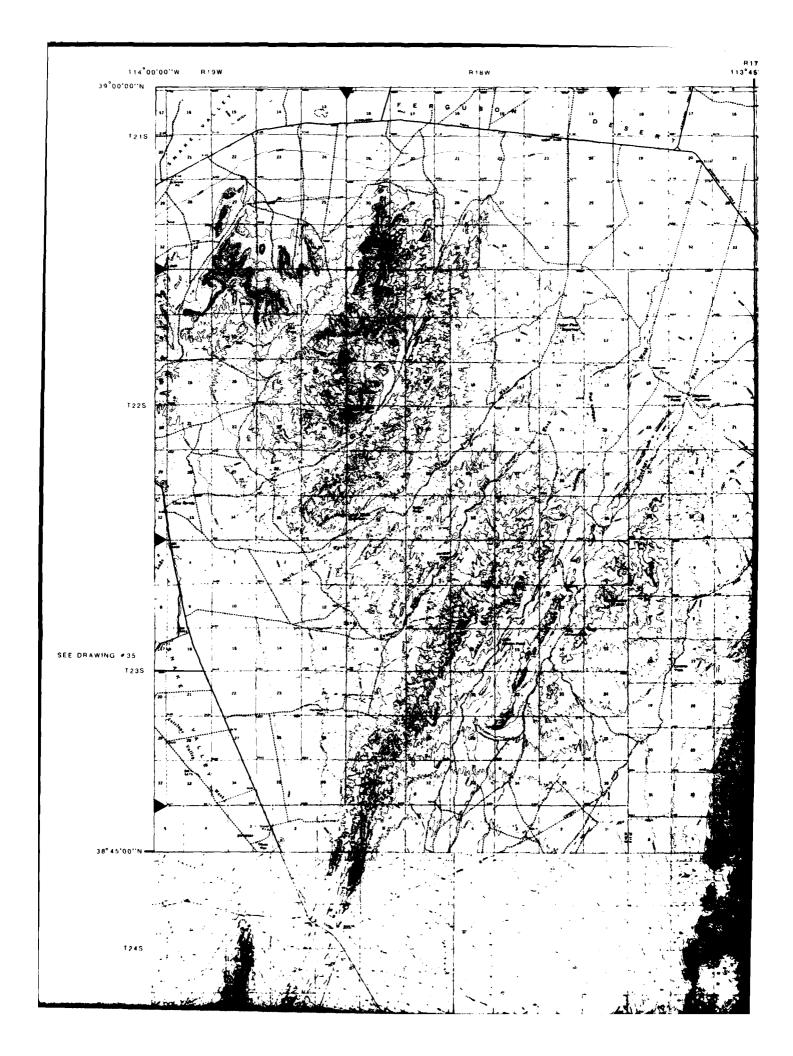




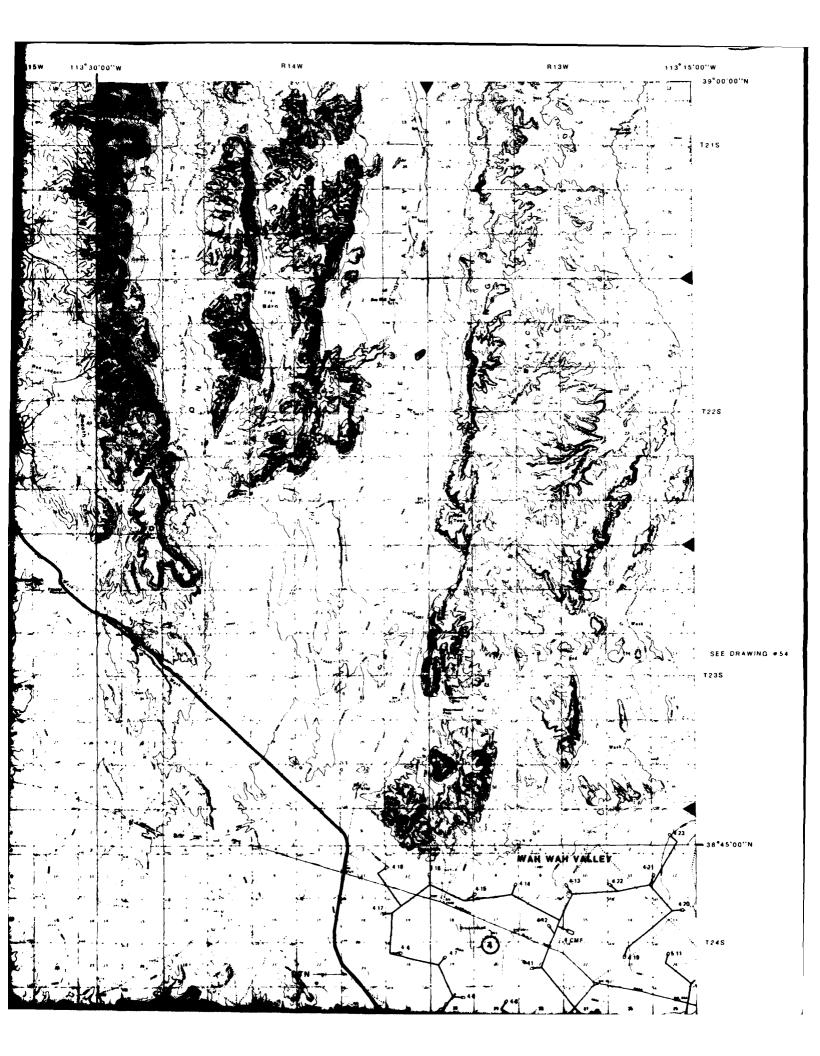
- A. 7% MINUTE TOPOGRAPHIC QUADRANGLE, USGS (1:24,000)
- B. 15 MINUTE TOPOGRAPHIC QUADRANGLE, USGS (1:82,500)
- C. 2 DEGREE TOPOGRAPHIC QUADRANGLE, USGS (1:260,000)
- D. COMPILEO BY STEREO PHOTOGRAMMETRIC METHODS BY ERTEC AIRBORNE SYSTEMS (FORMERLY FUGRO GEOMETRICS) AT 1:82,500

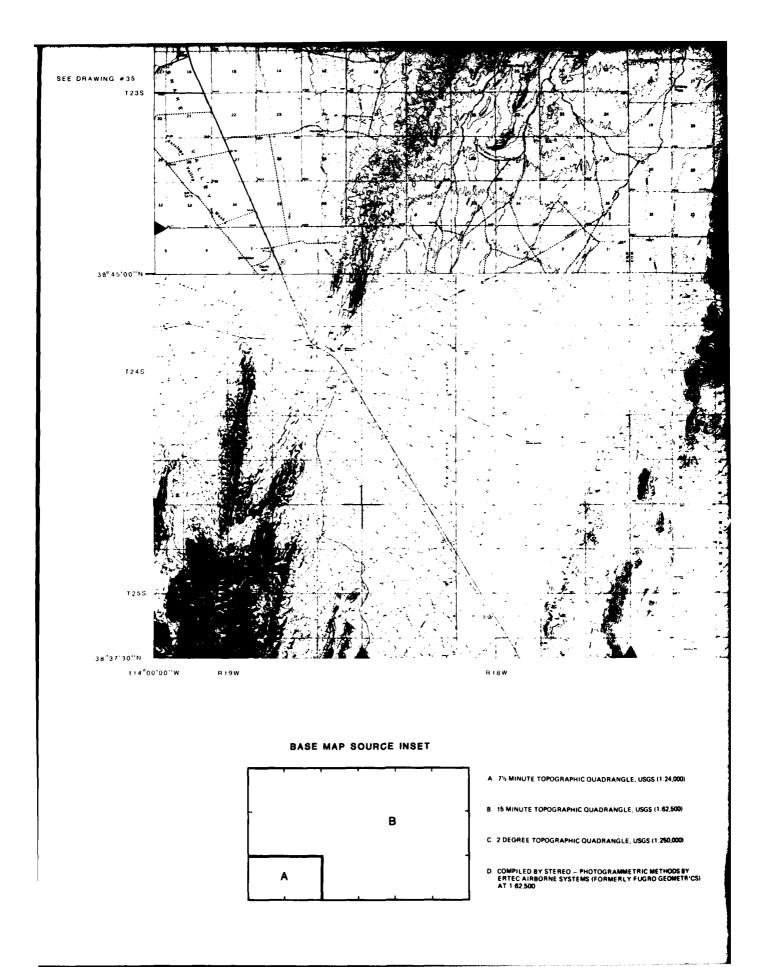


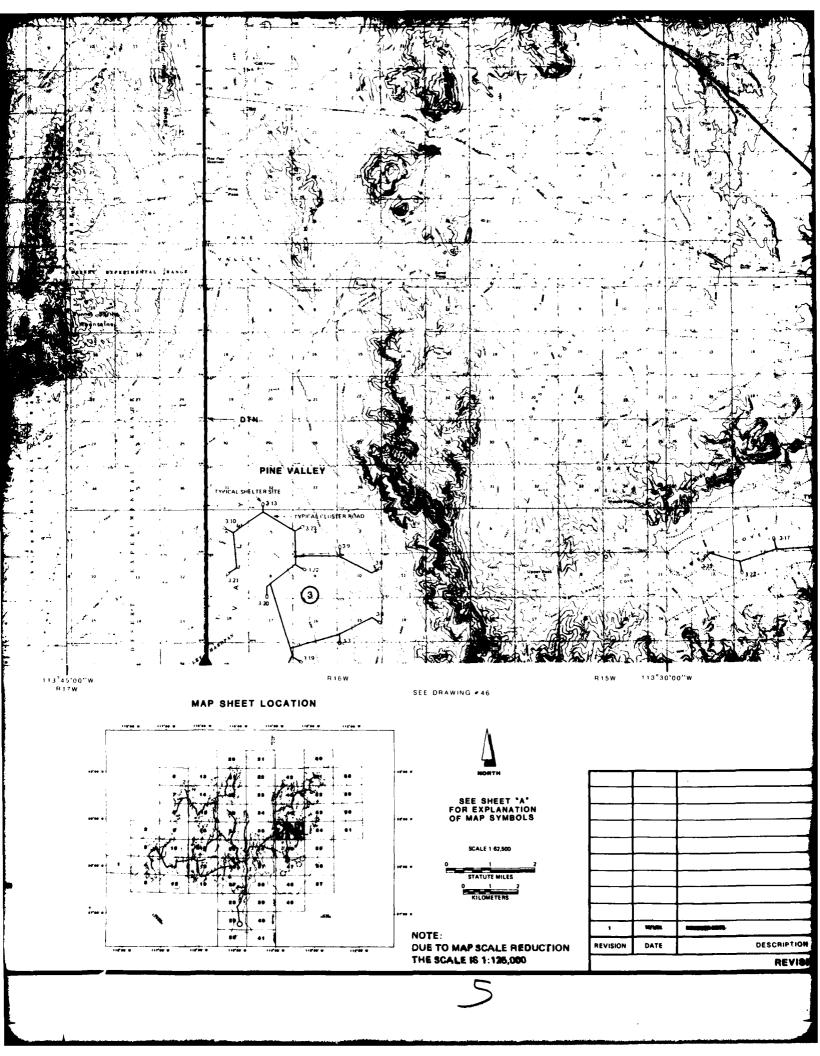


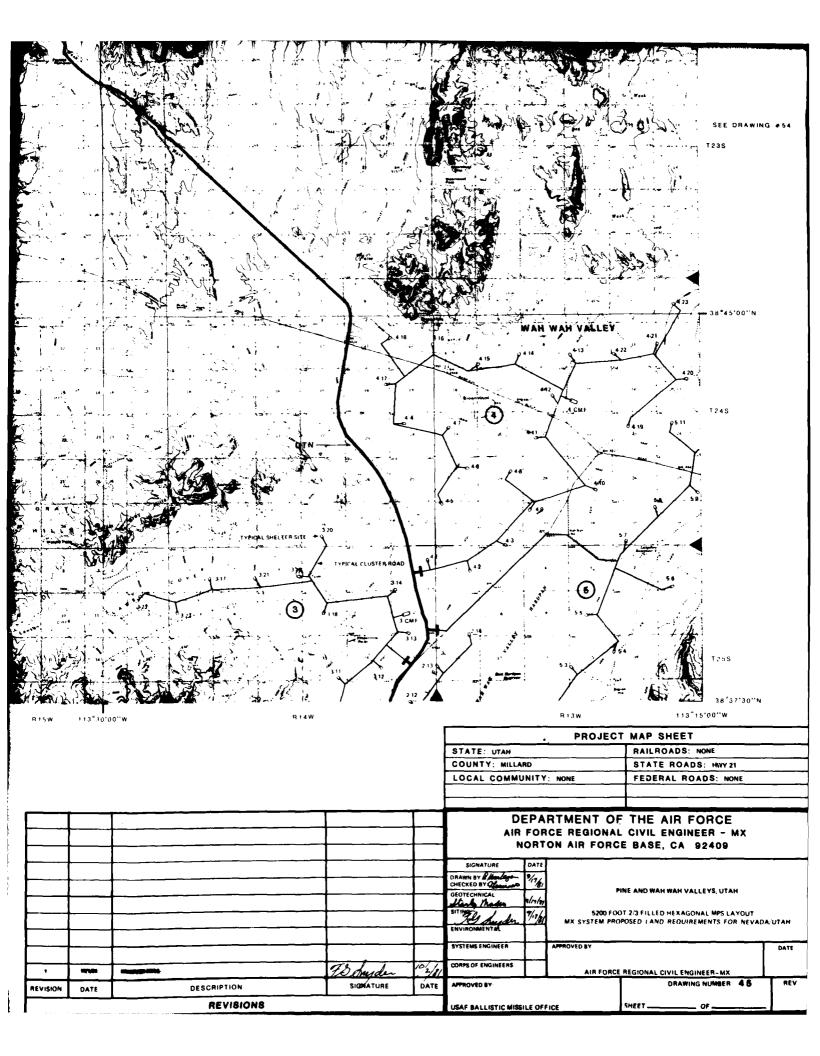


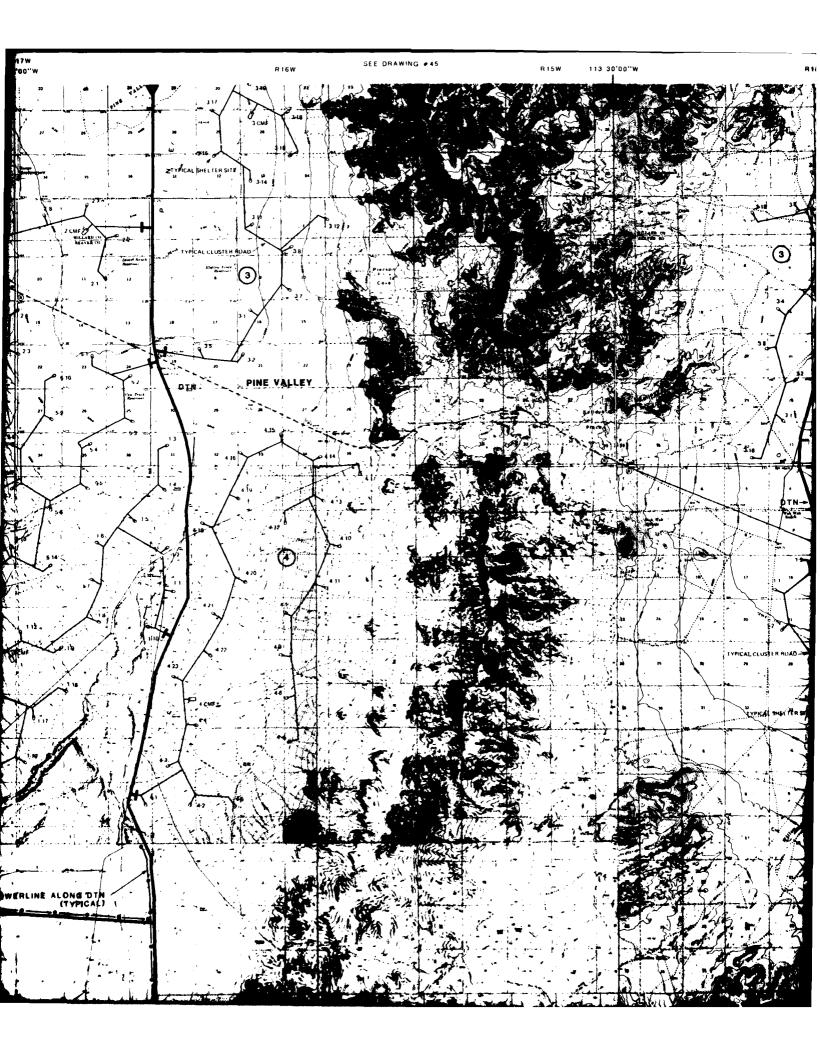


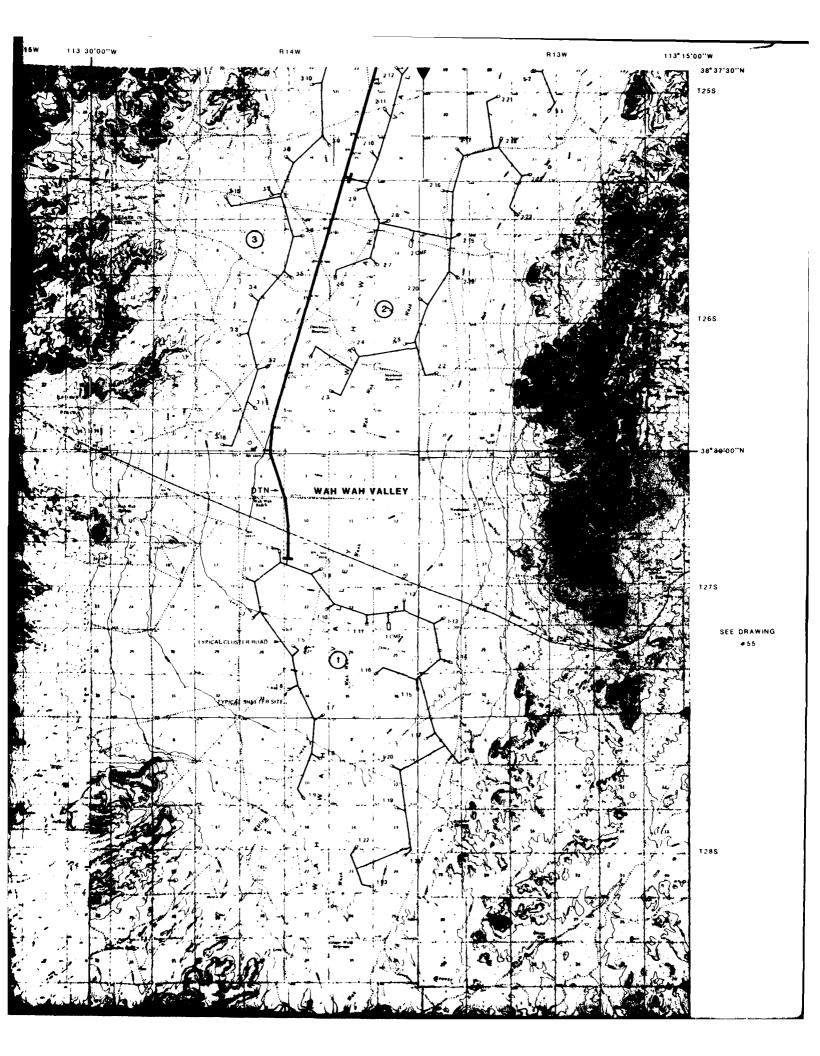


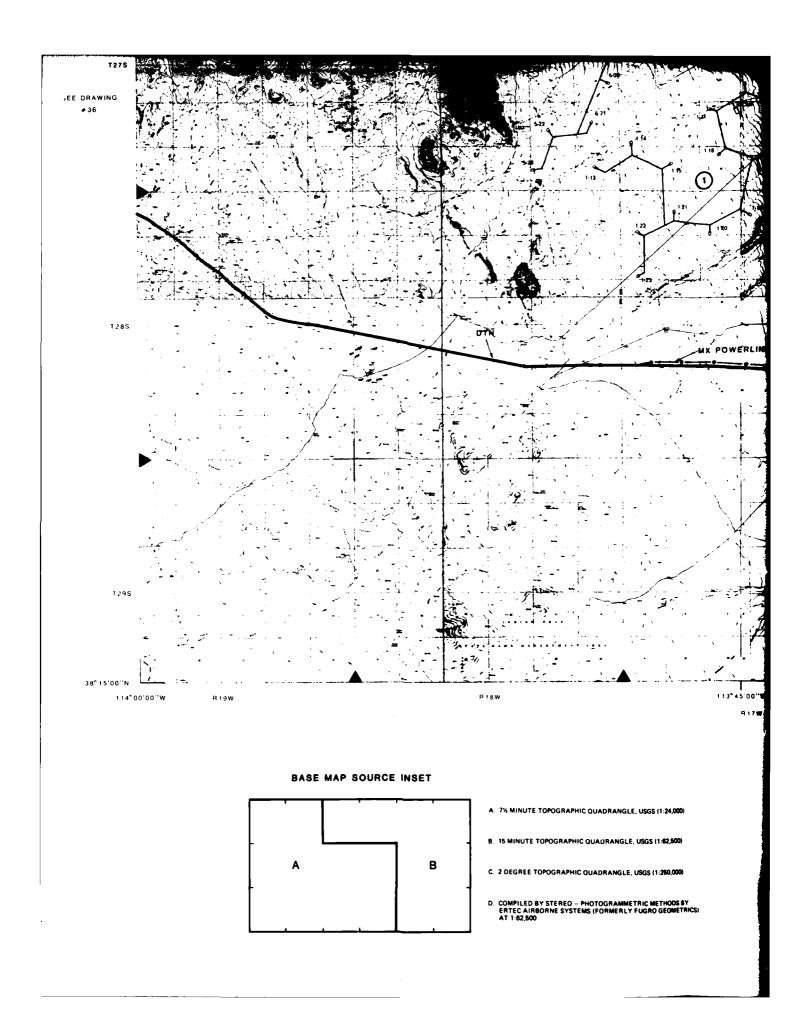


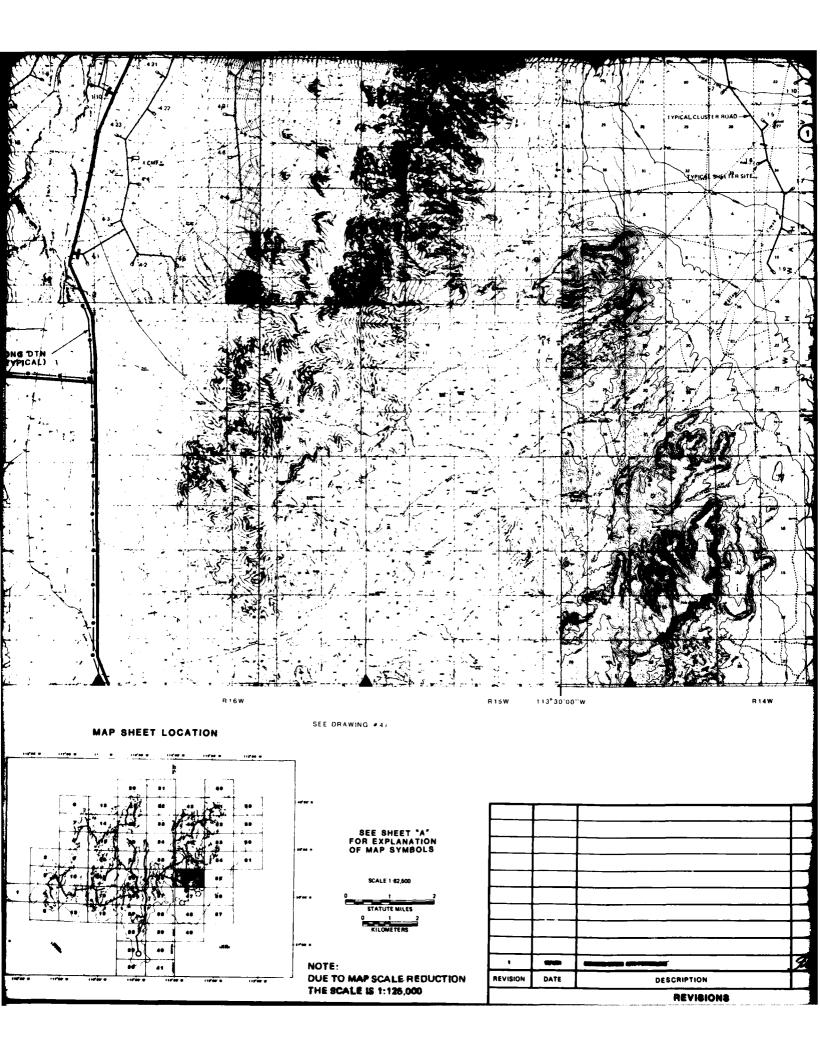


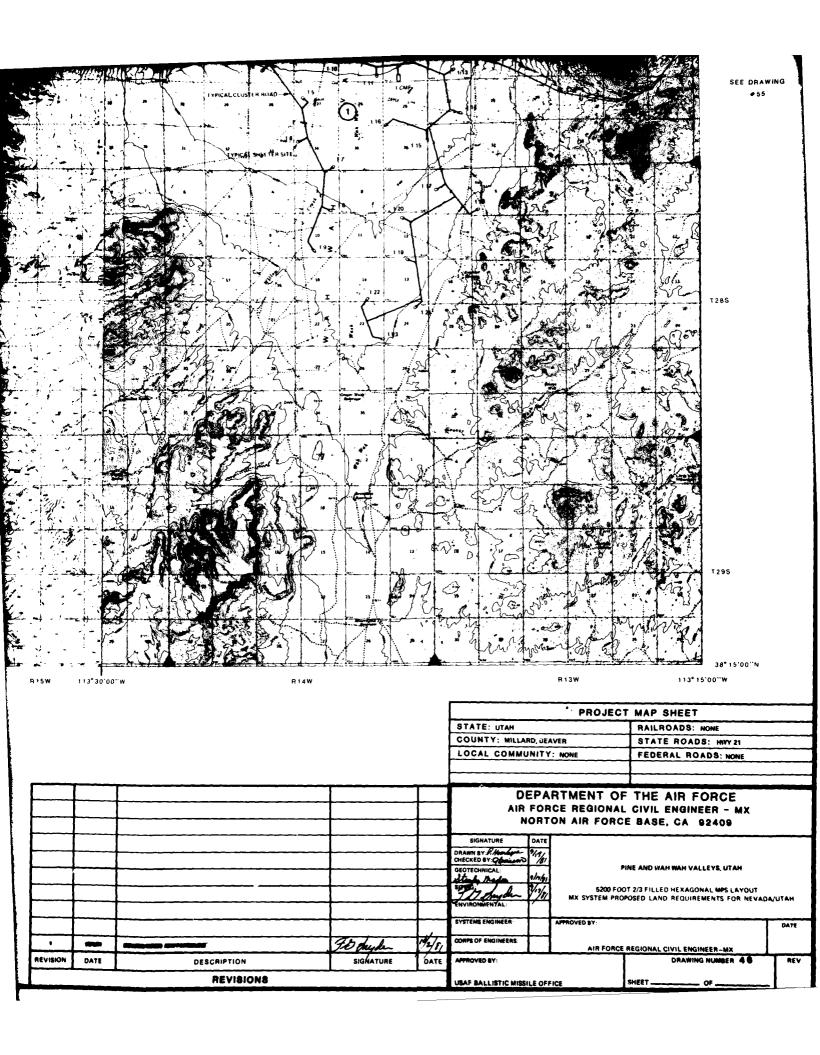


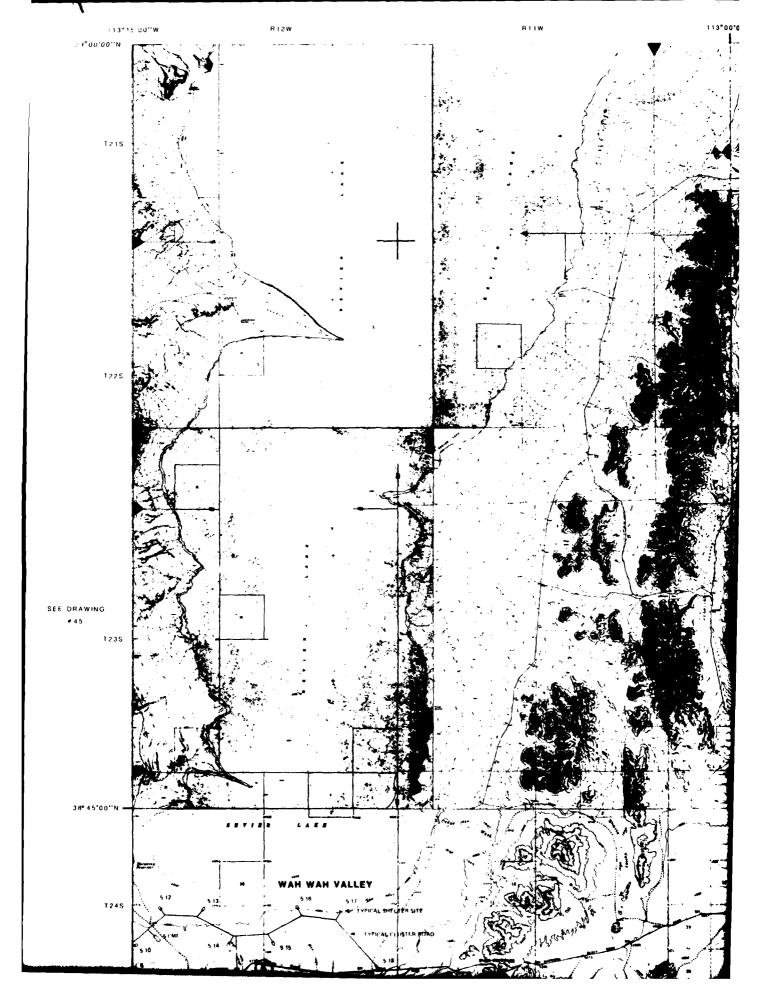


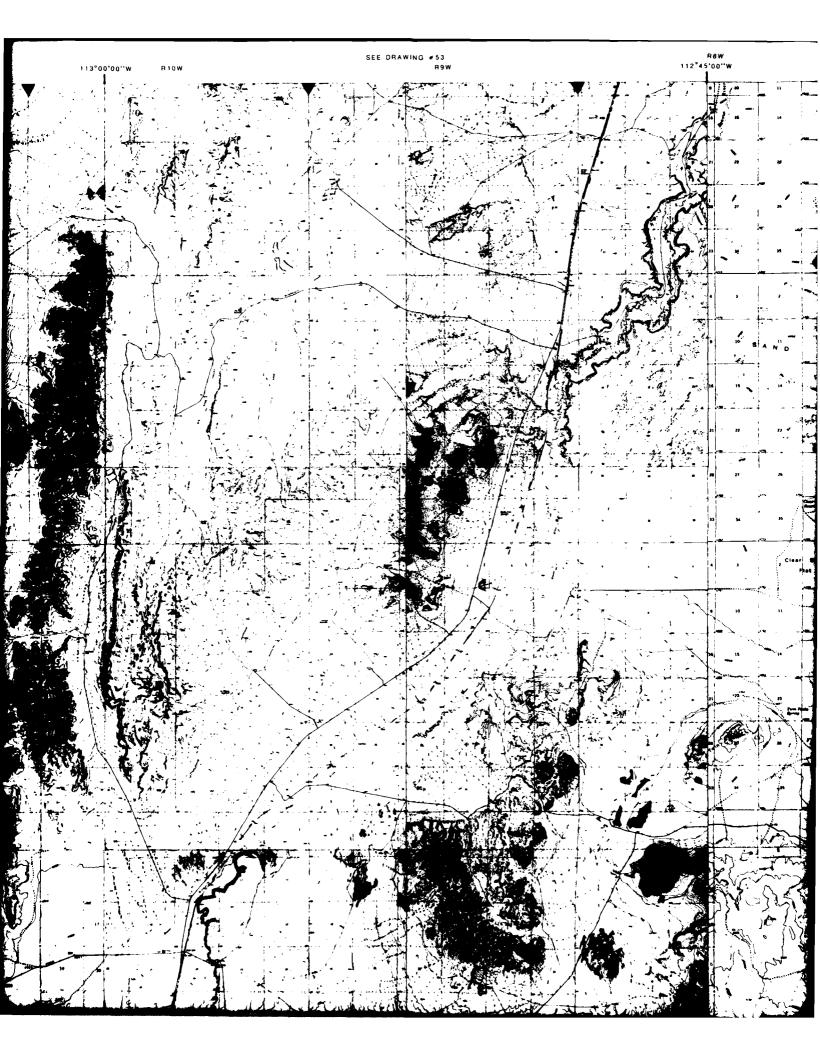


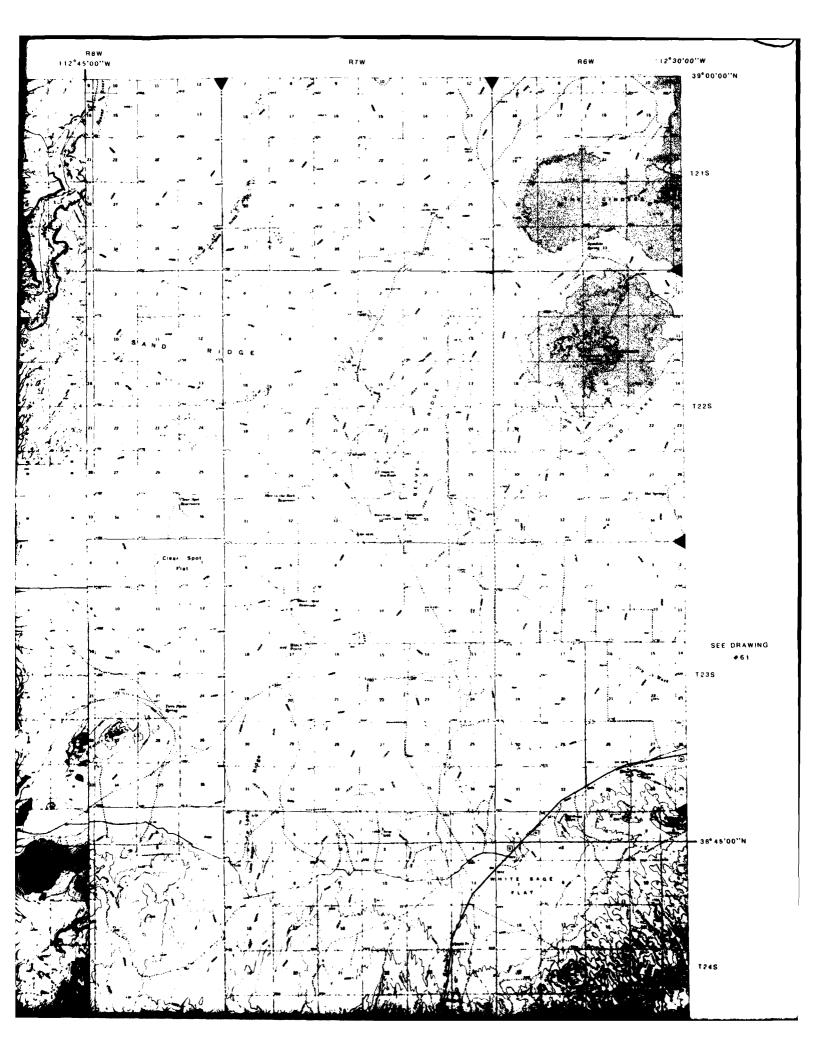


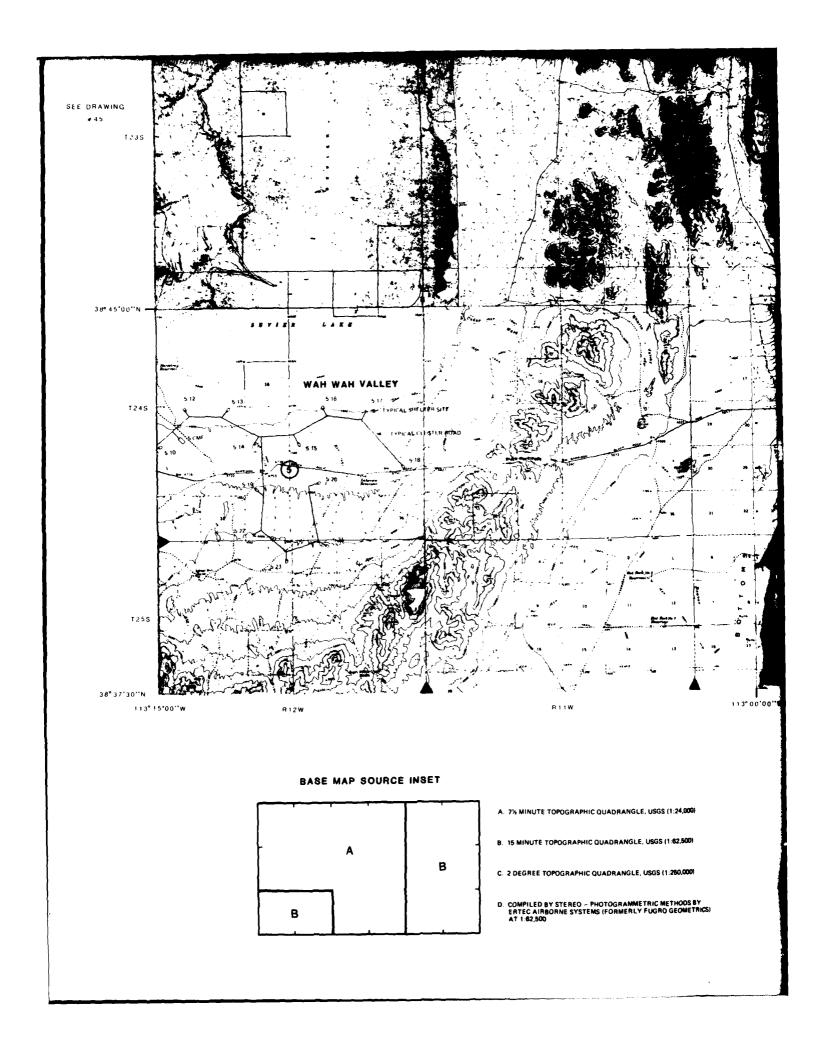


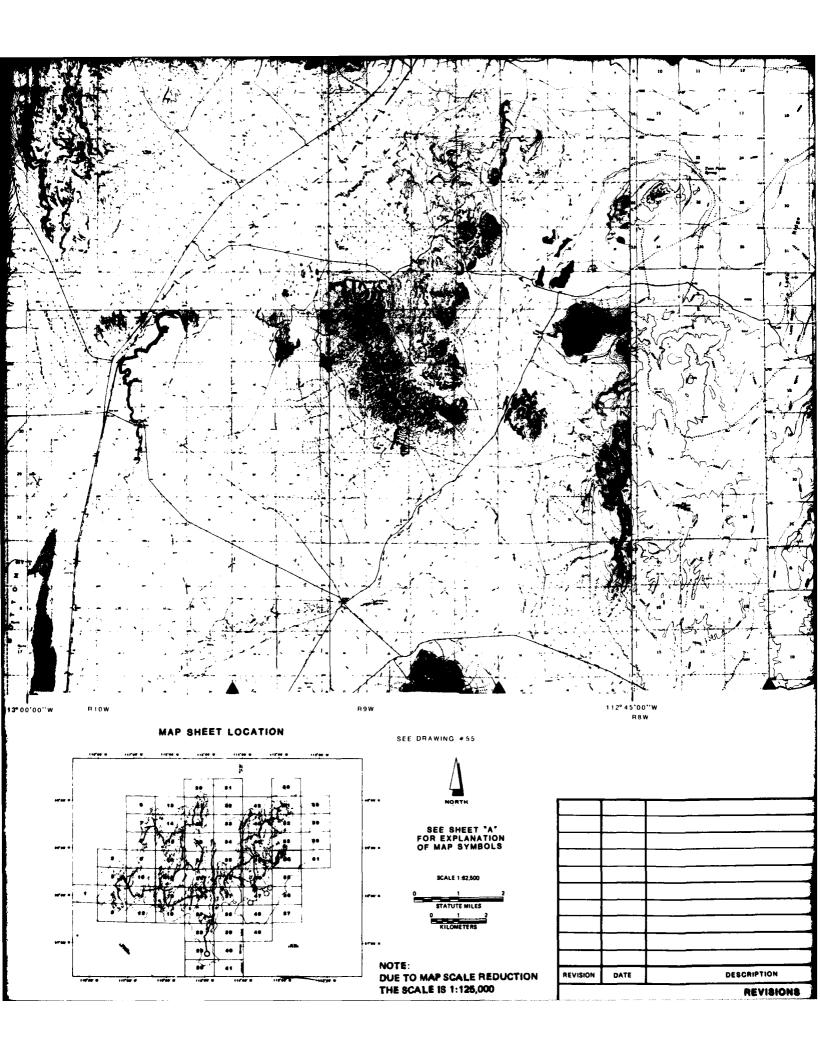


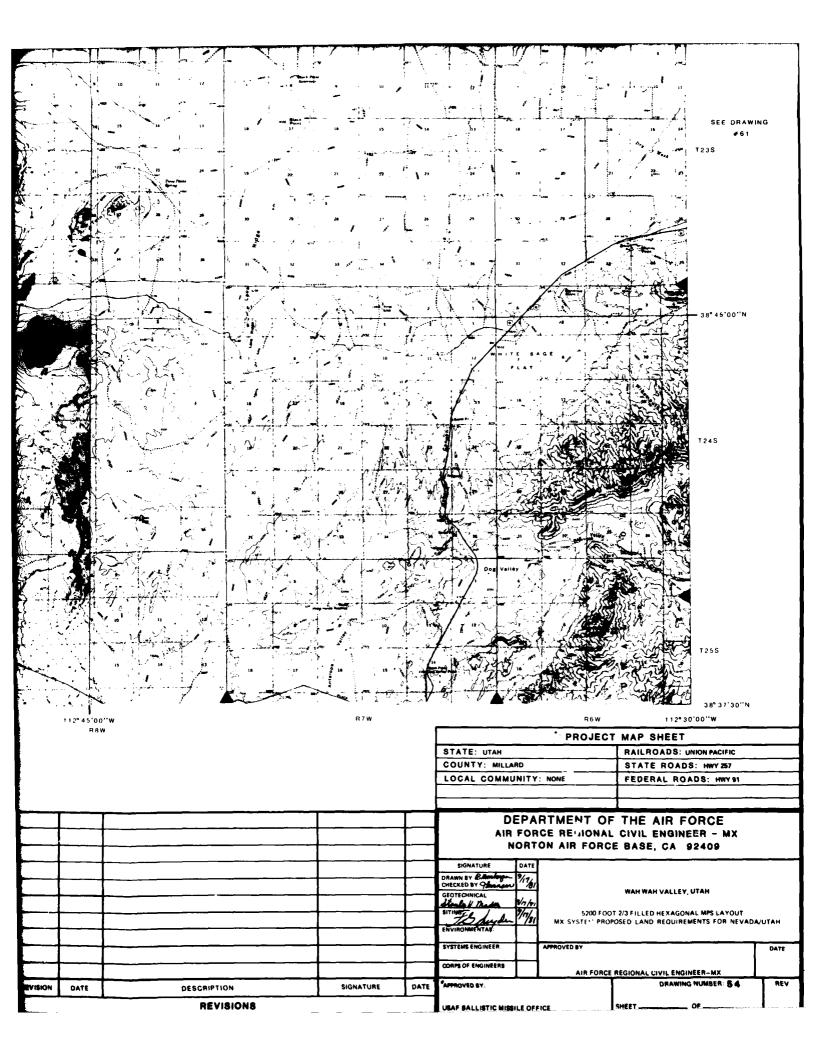




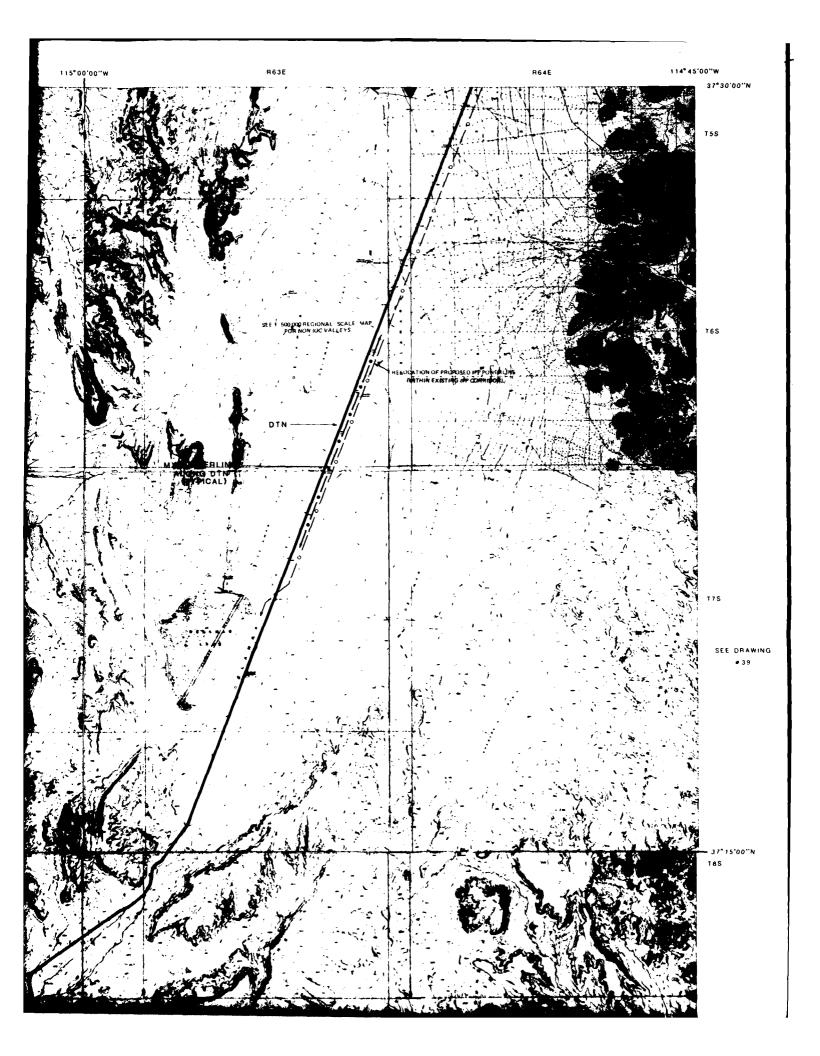


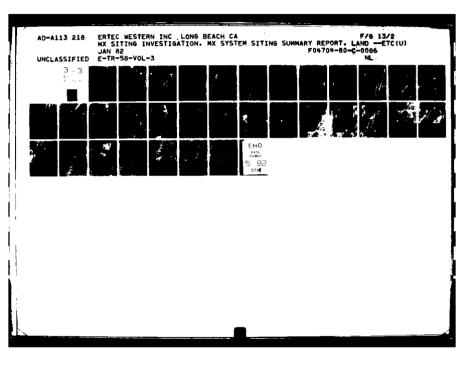


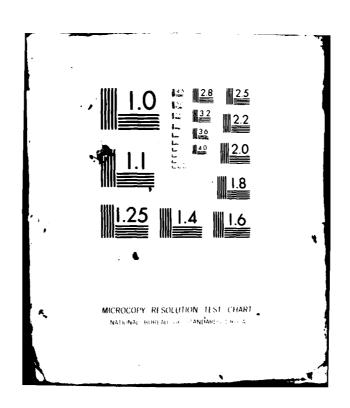


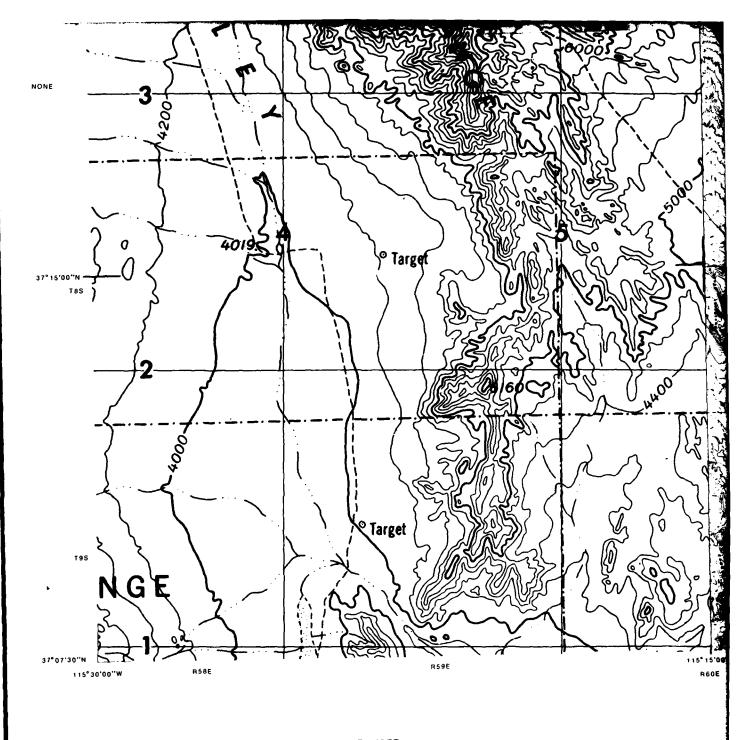




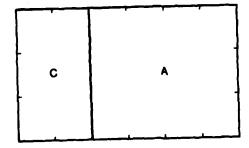




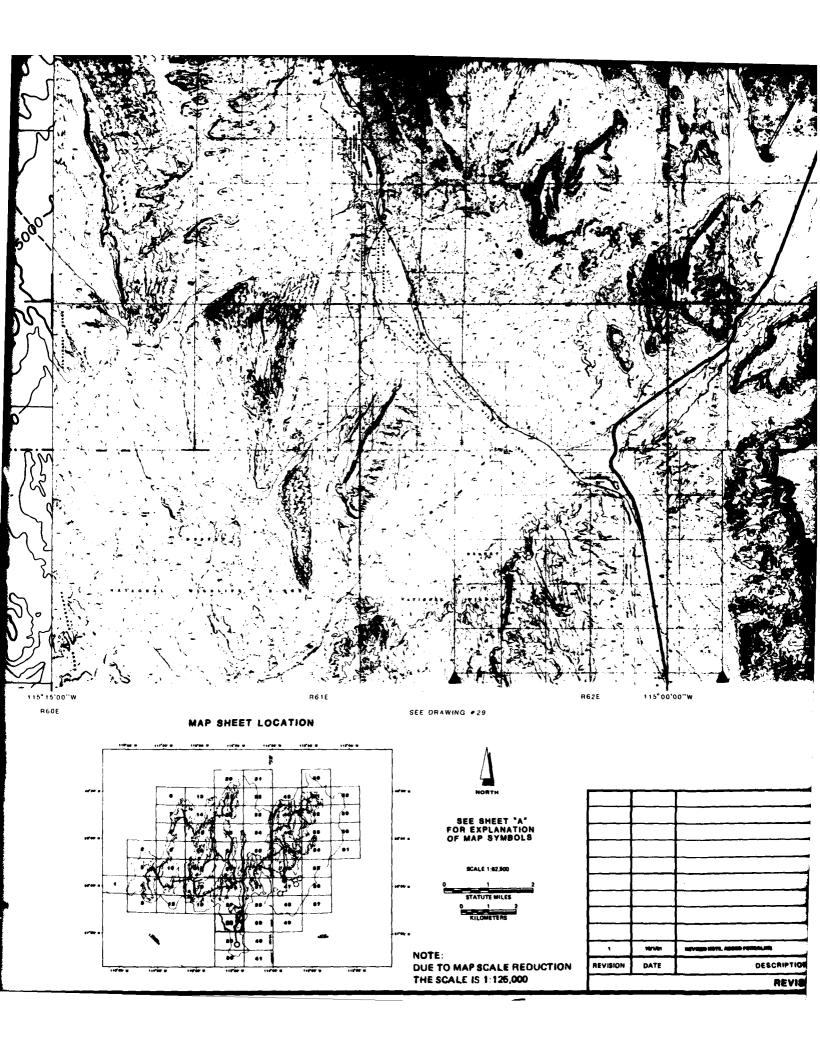


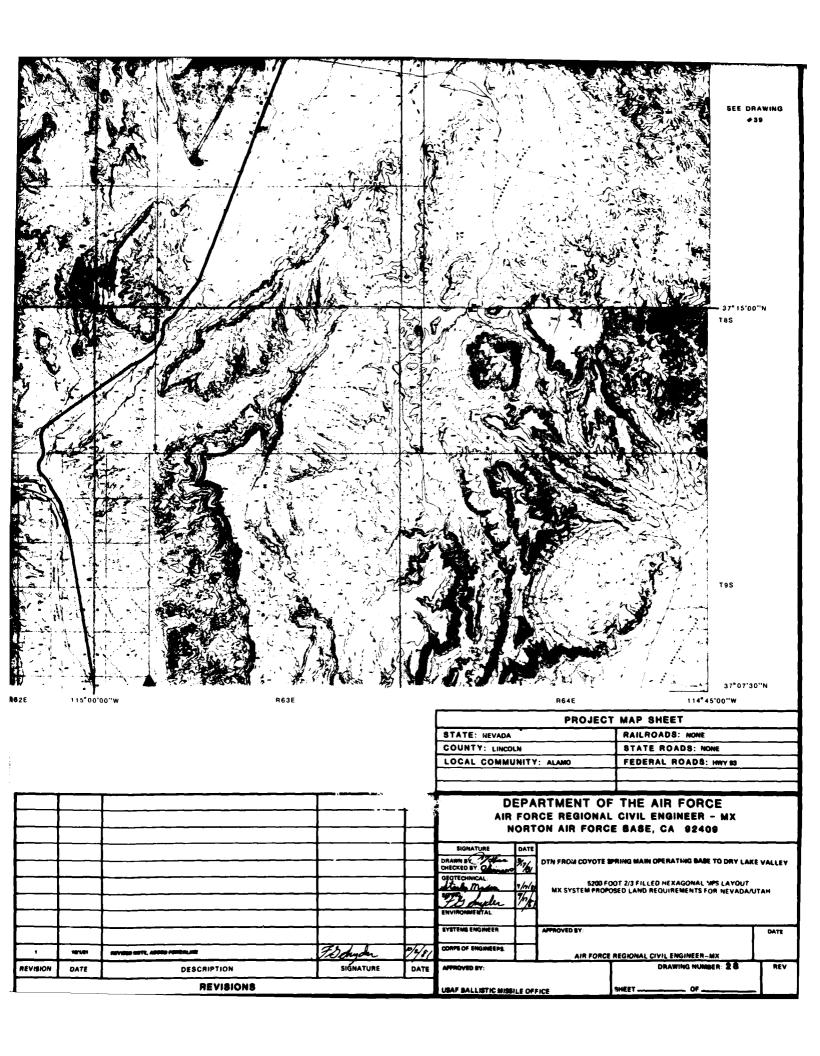


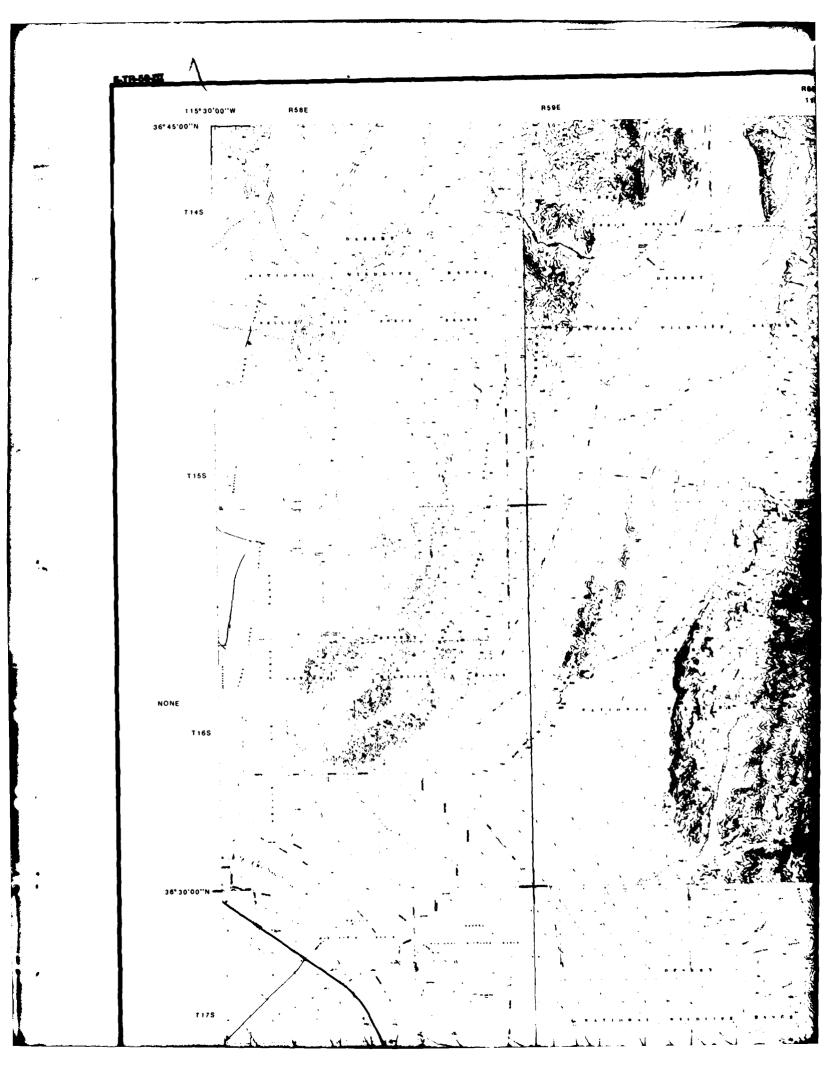
## BASE MAP SOURCE INSET

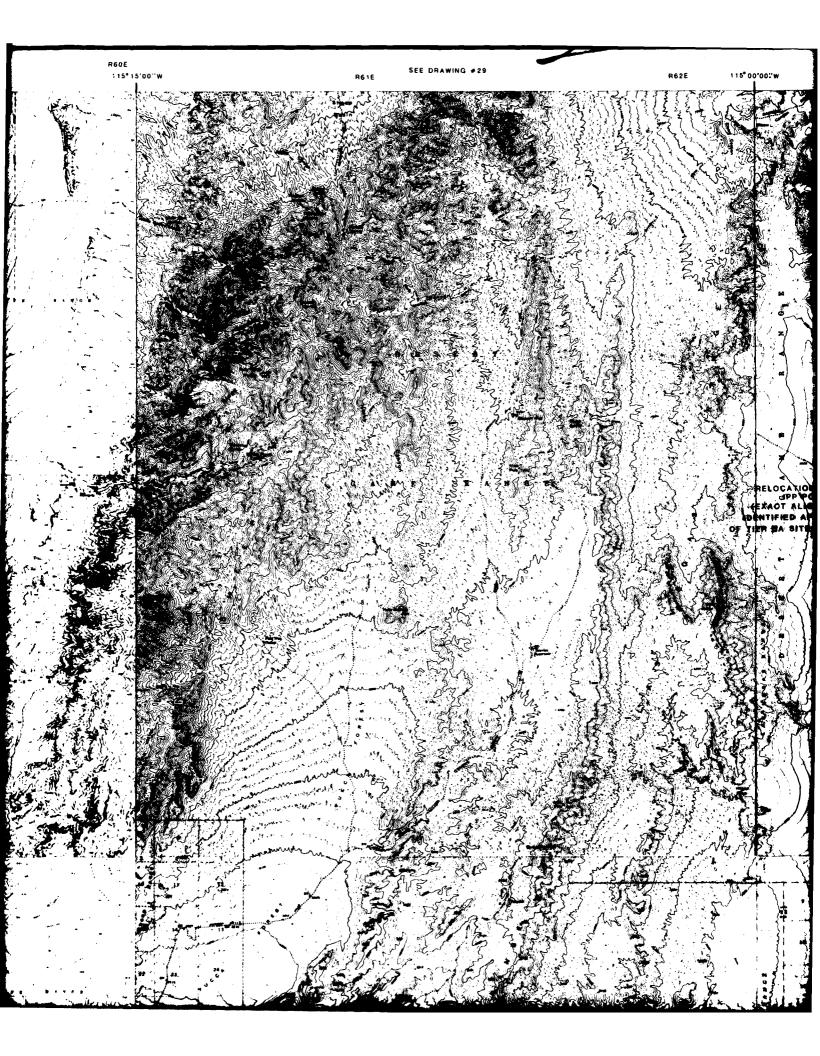


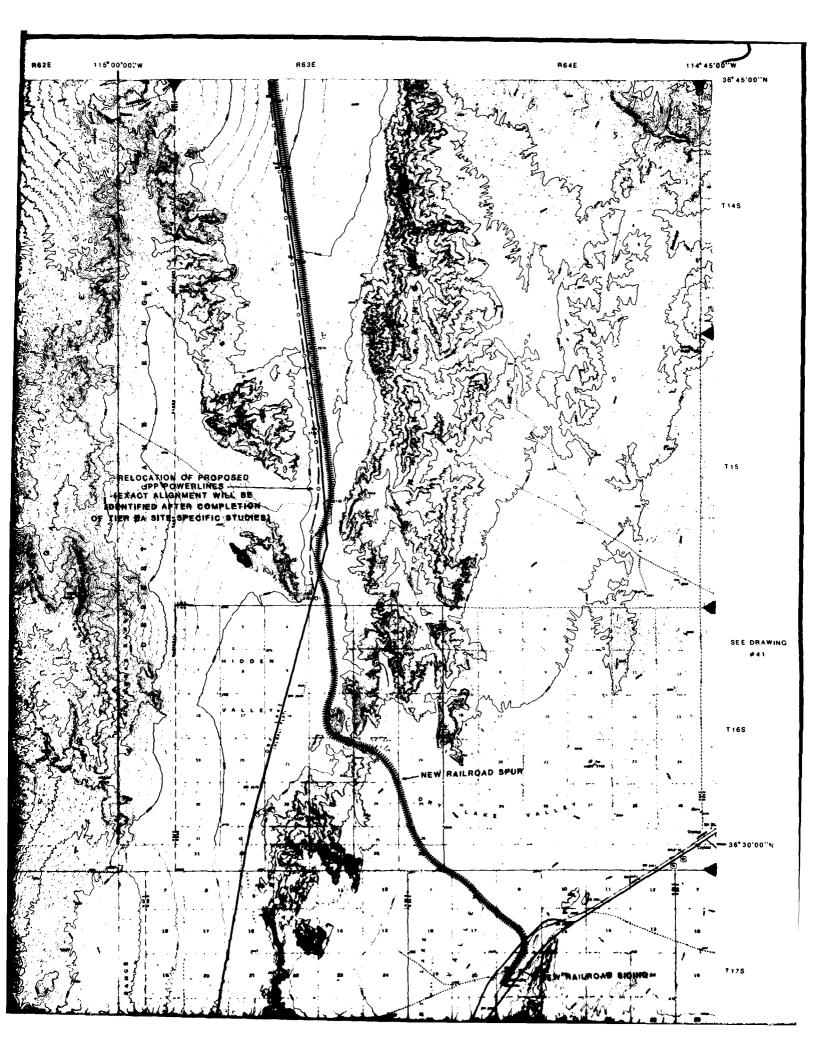
- A. 7% MINUTE TOPOGRAPHIC QUADRANGLE, USGS (1:24,000)
- B. 15 MINUTE TOPOGRAPHIC QUADRANGLE, USGS (1:82,500)
- C. 2 DEGREE TOPOGRAPHIC QUADRANGLE, USGS (1:280,000)
- D. COMPILED BY STEREO PHOTOGRAMMETRIC METHODS BY ERTEC AIRBORNE SYSTEMS (FORMERLY FUGRO GEOMETRICS) AT 1:62,500

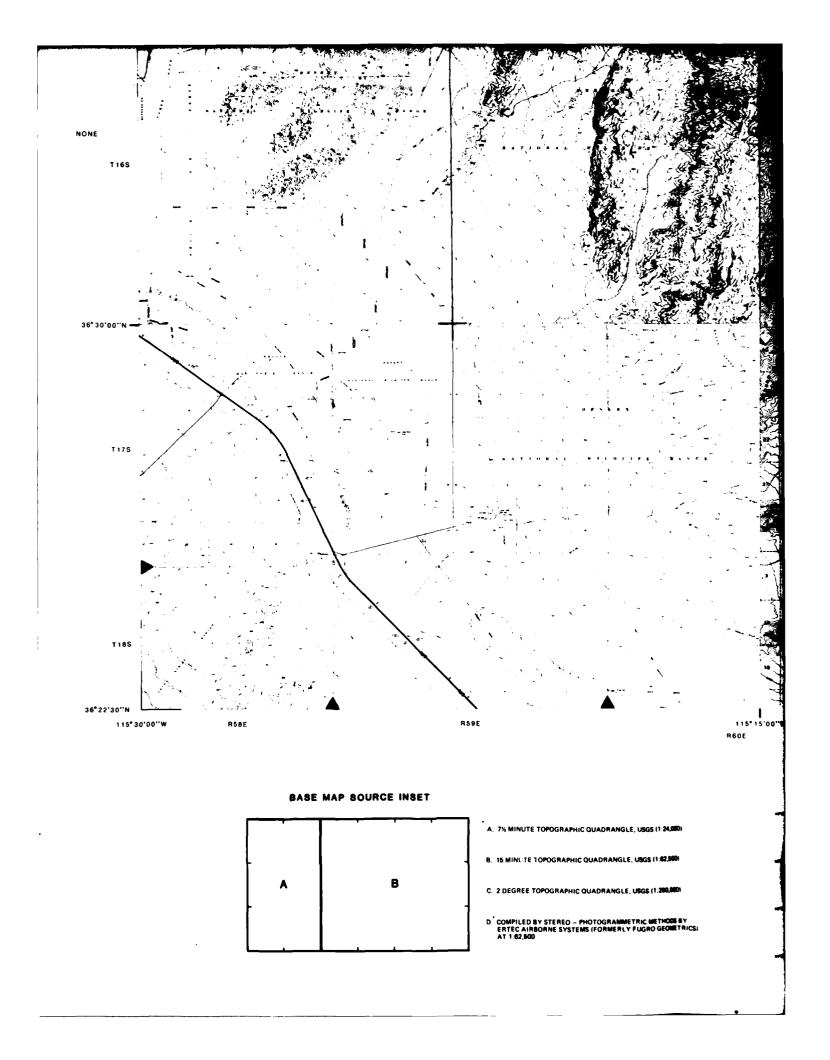


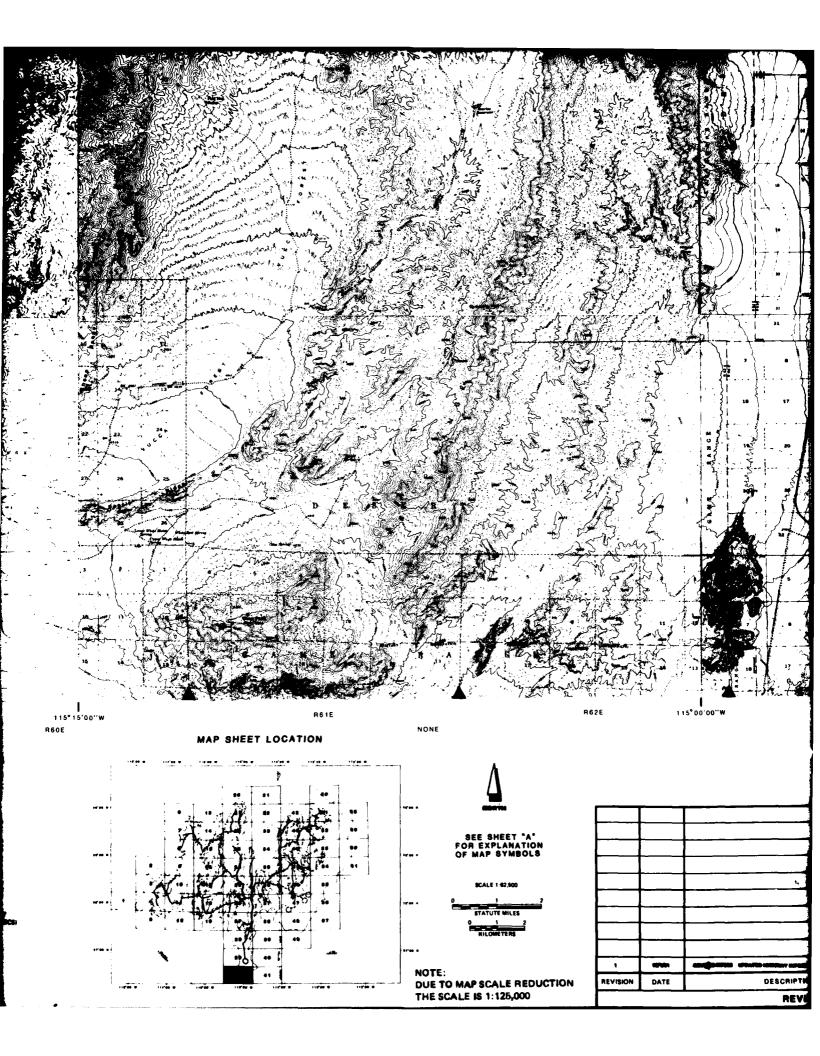


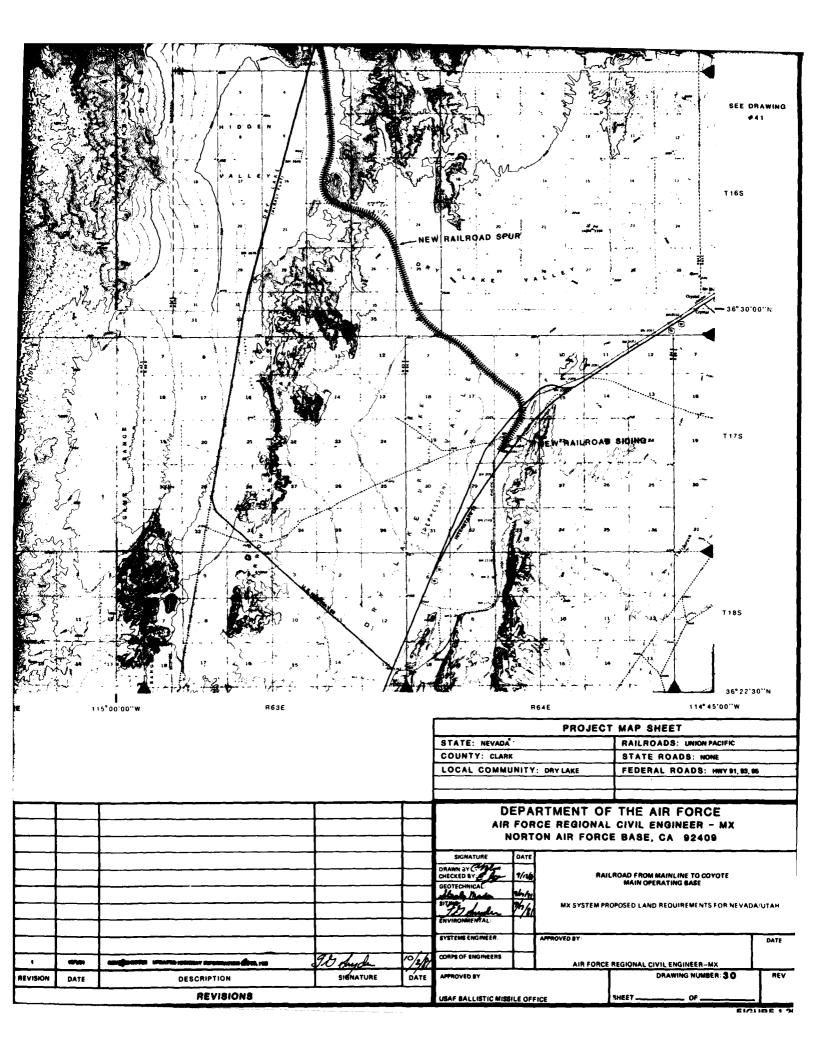


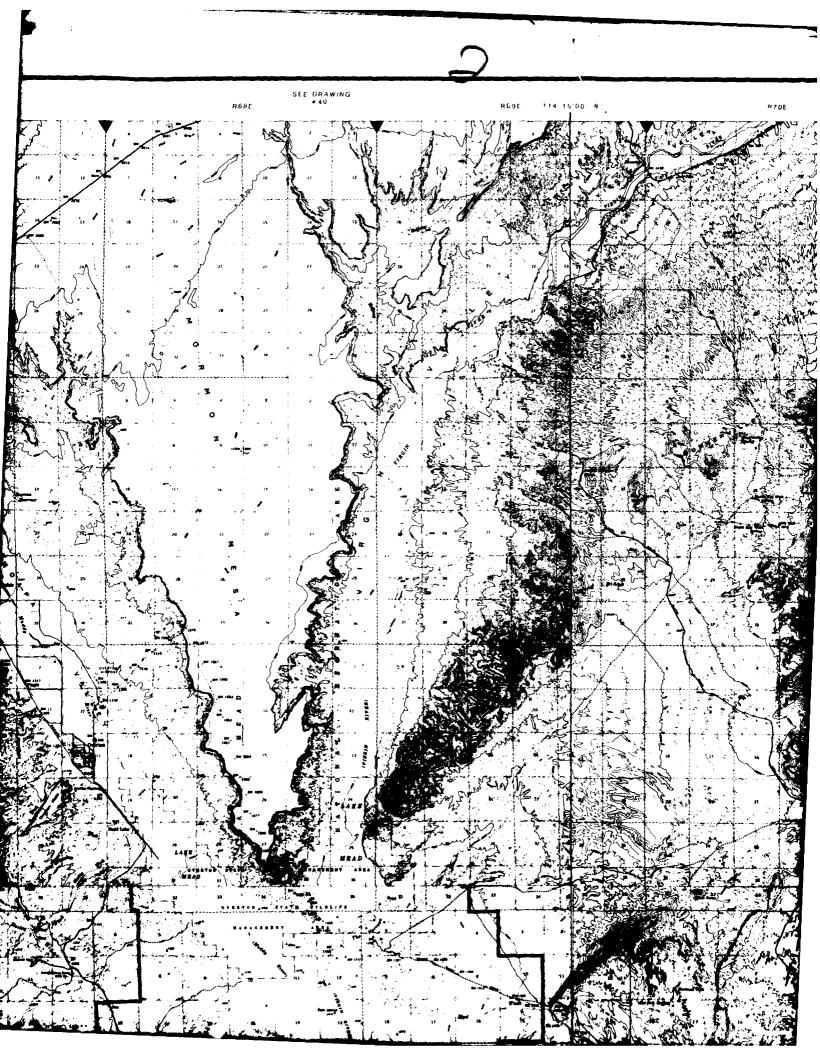




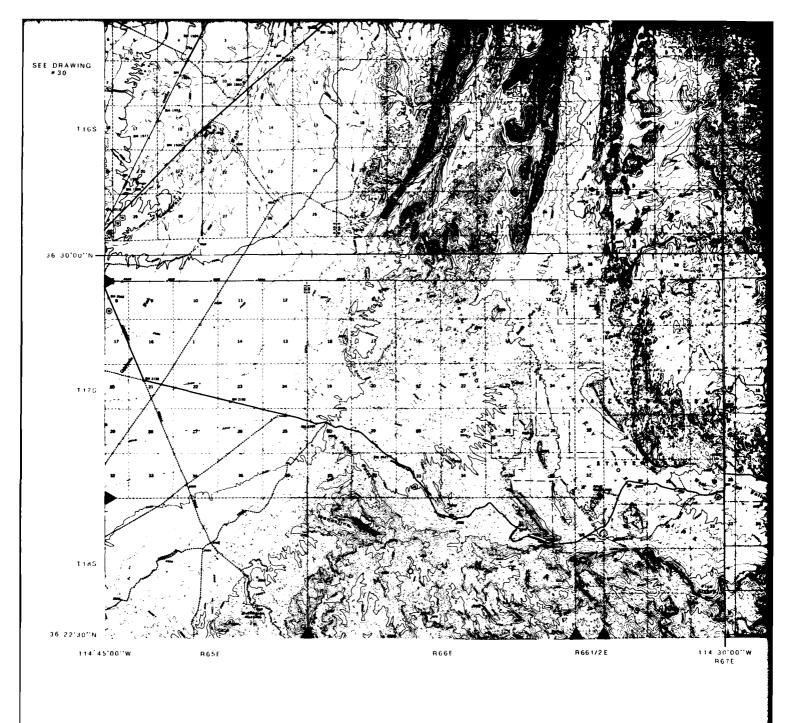




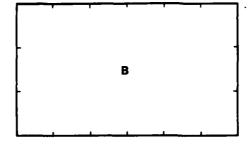




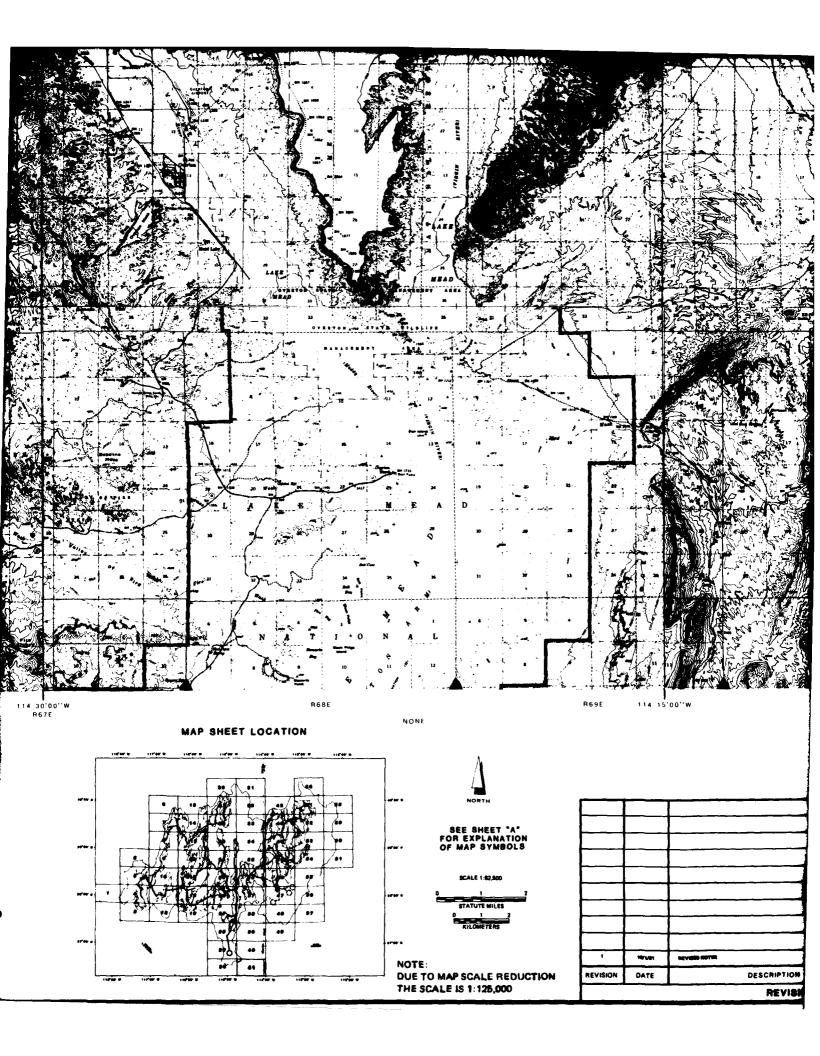


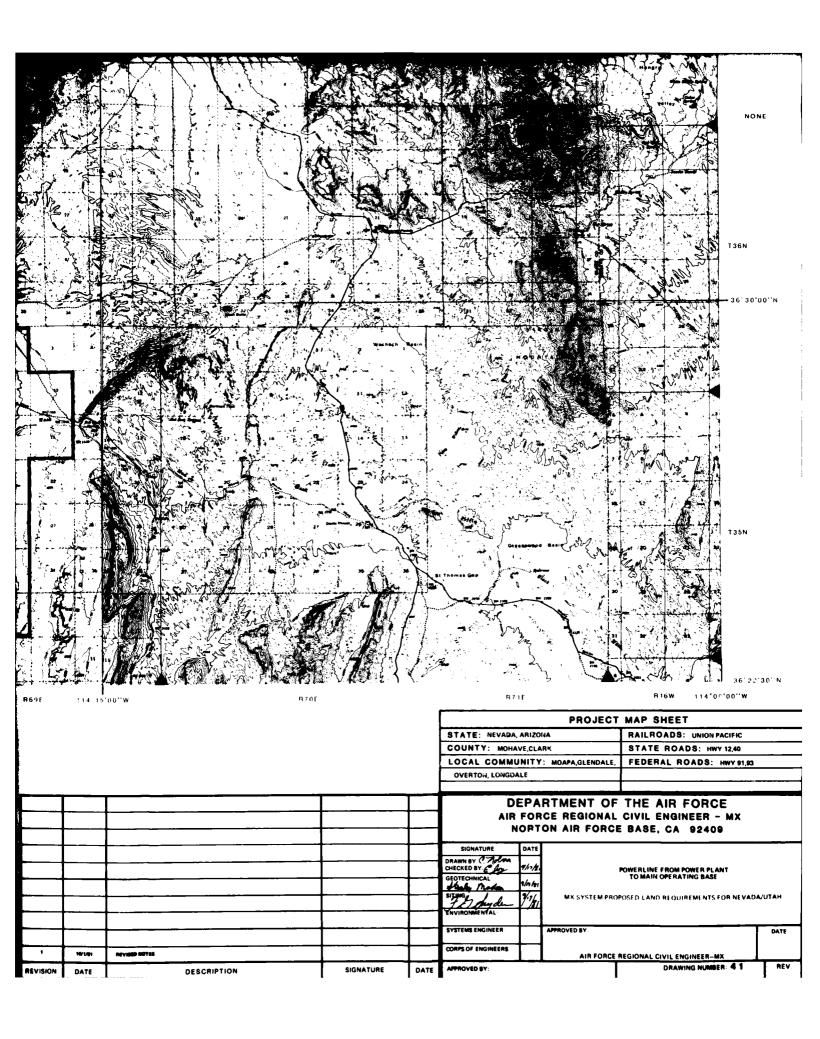


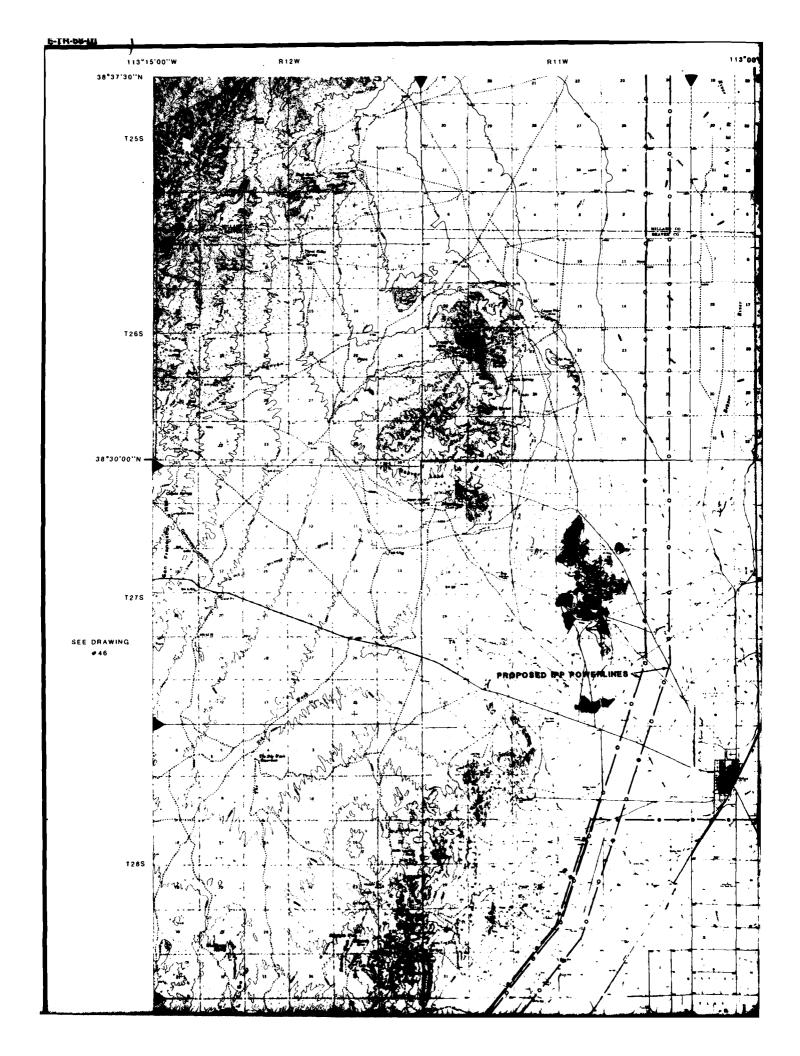


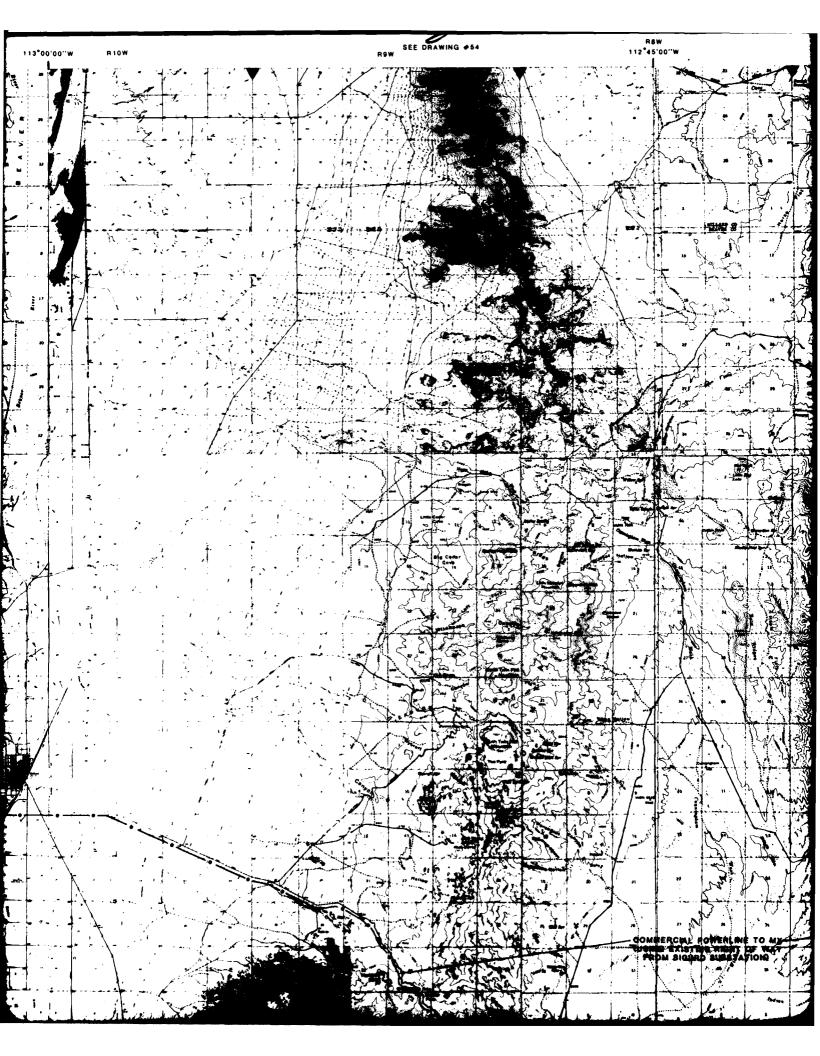


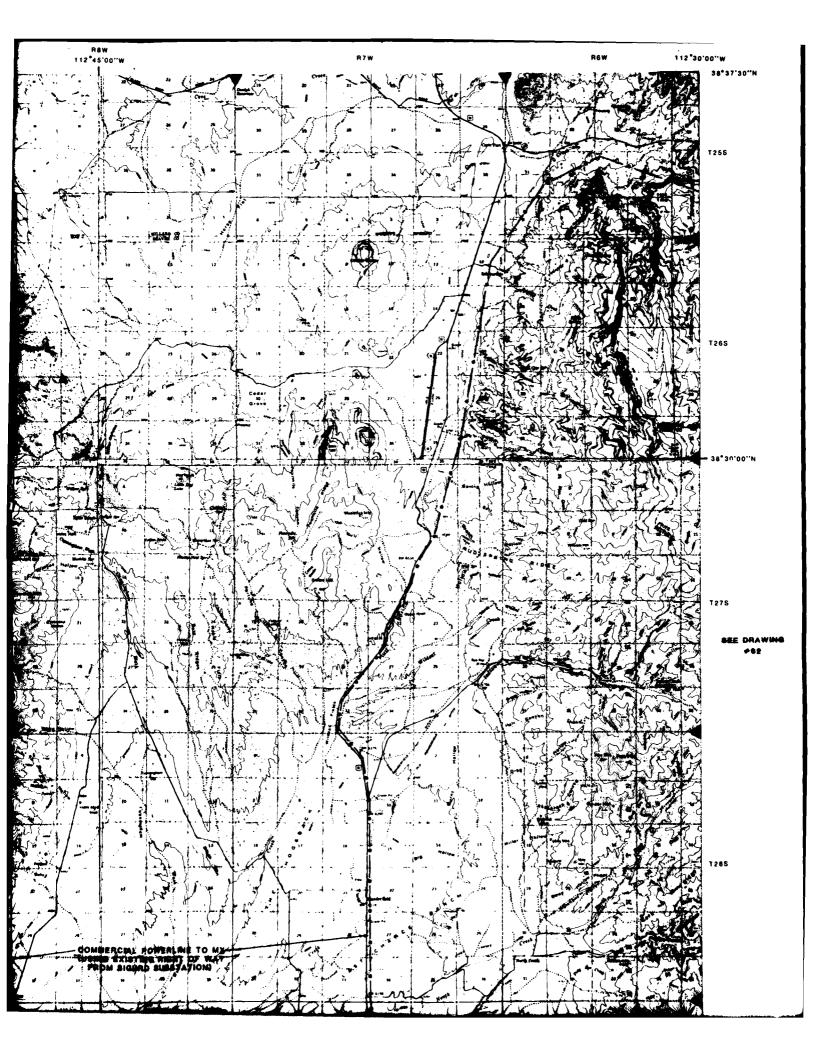
- A. 7% MINUTE TOPOGRAPHIC QUADRANGLE, USGS (1:24,000)
- B. 15 MINUTE TOPOGRAPHIC QUADRANGLE, USGS (1:62,500)
- C. 2 DEGREE TOPOGRAPHIC QUADRANGLE, USGS (1:260,000)
- D. COMPILED BY STEREO PHOTOGRAMMETRIC METHODS BY ERTEC AIRBORNE SYSTEMS (FORMERLY FUGRO GEOMETRICS) AT 1:82,500

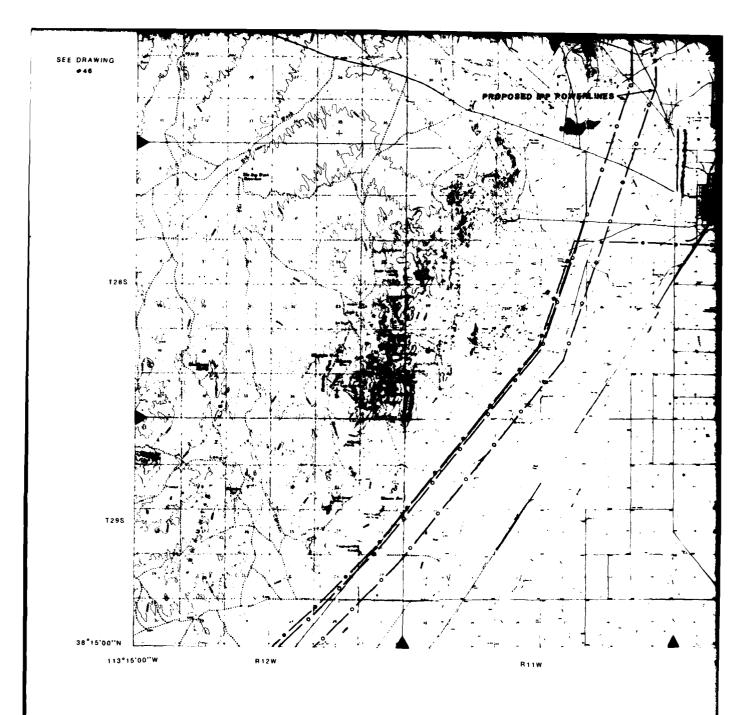




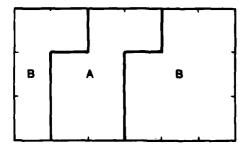




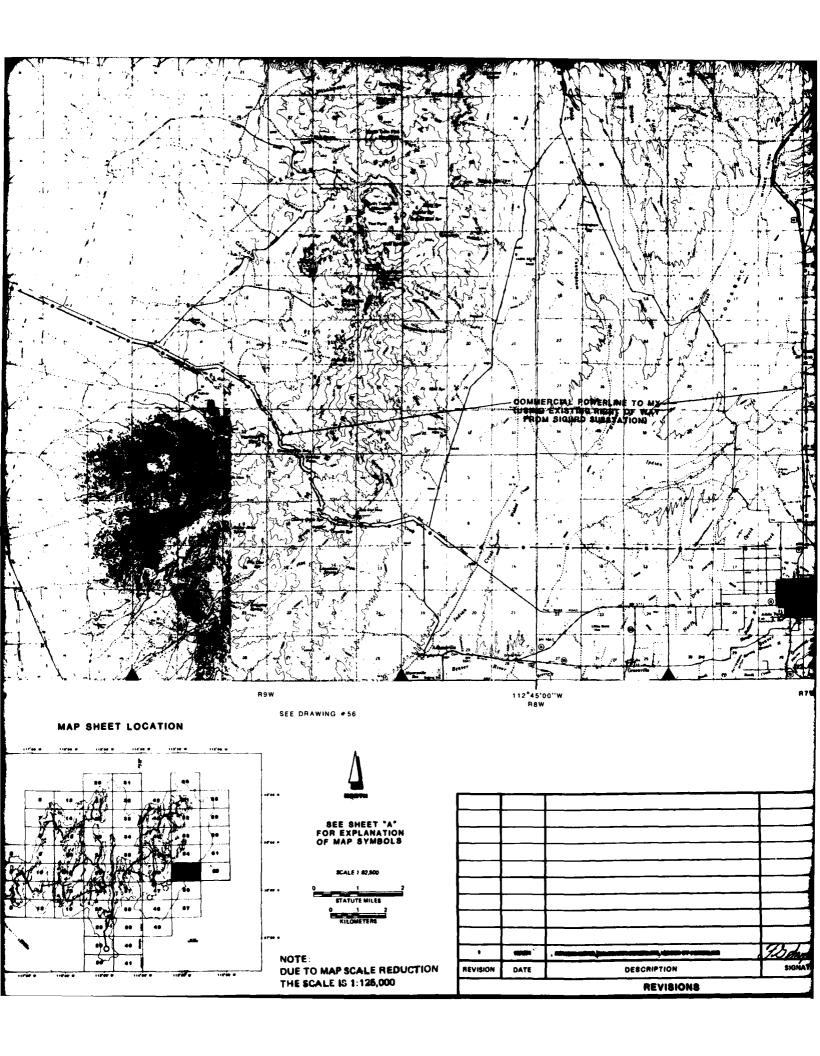


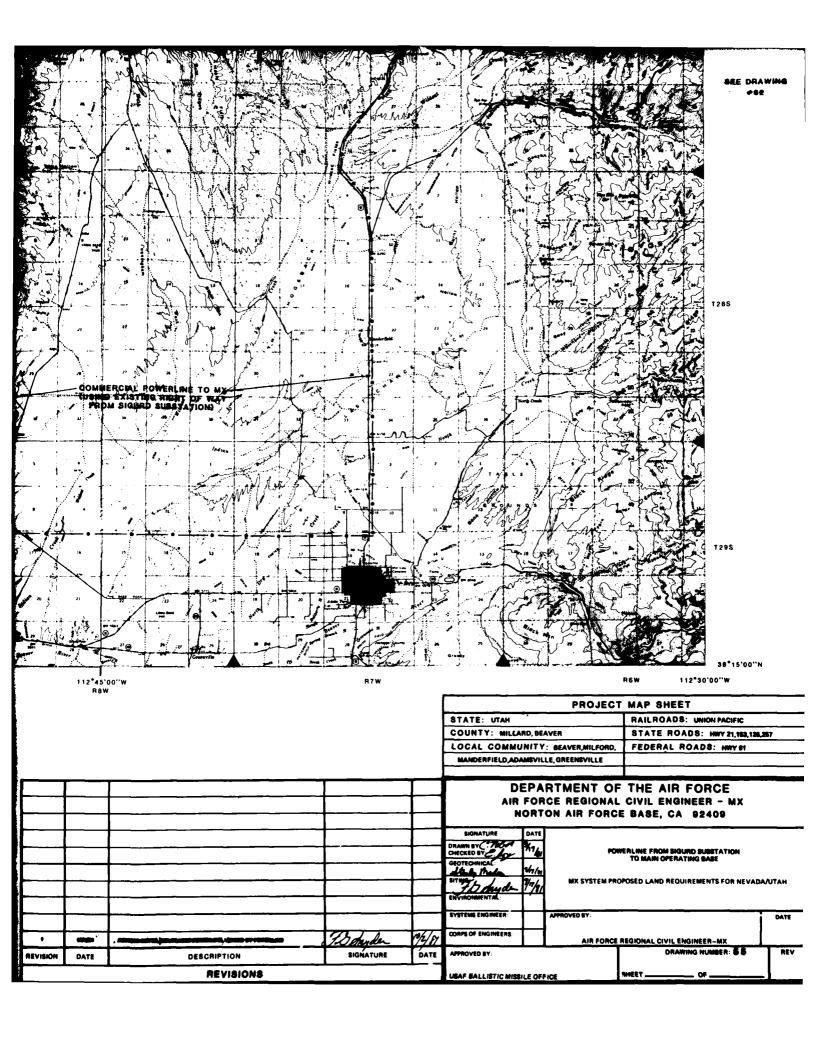


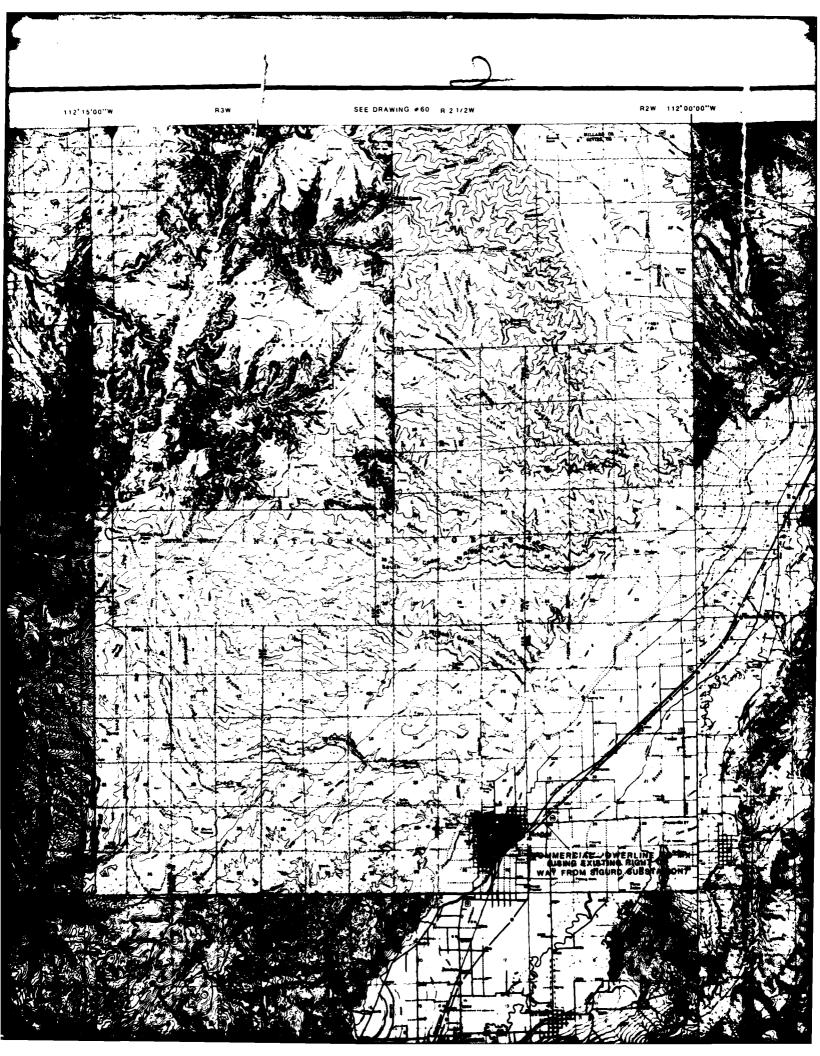
## BASE MAP SOURCE INSET

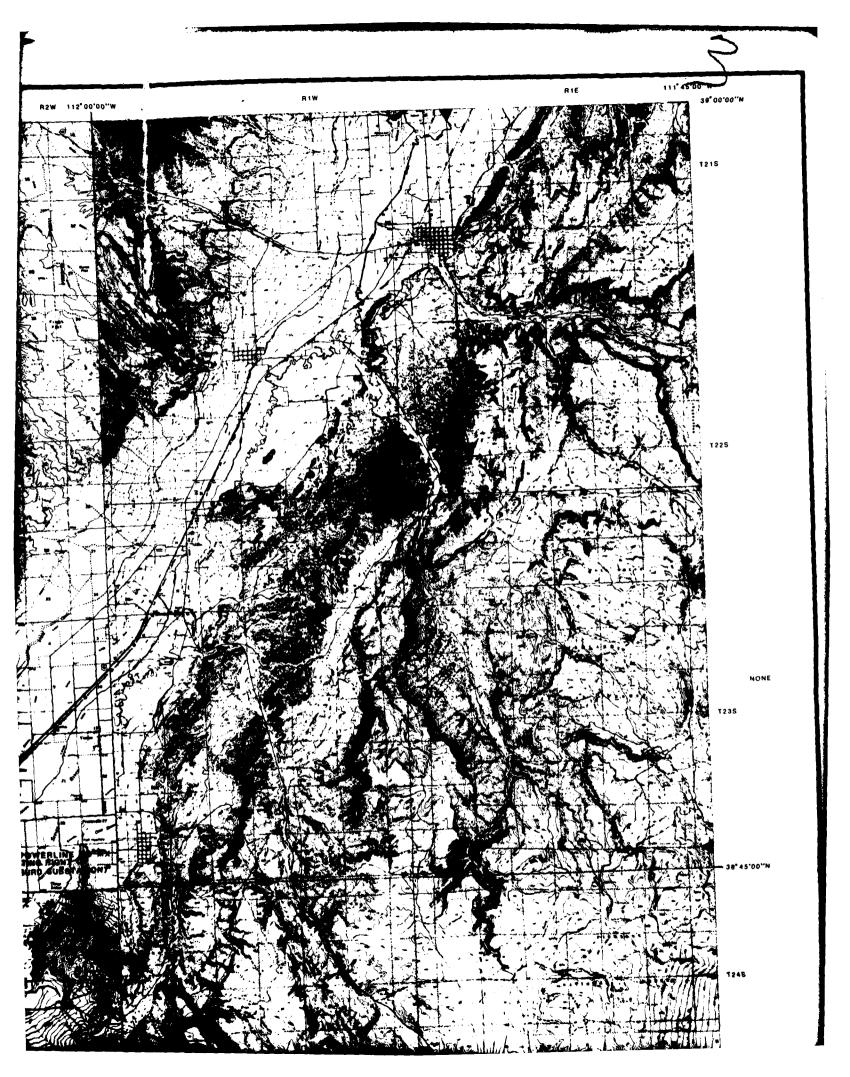


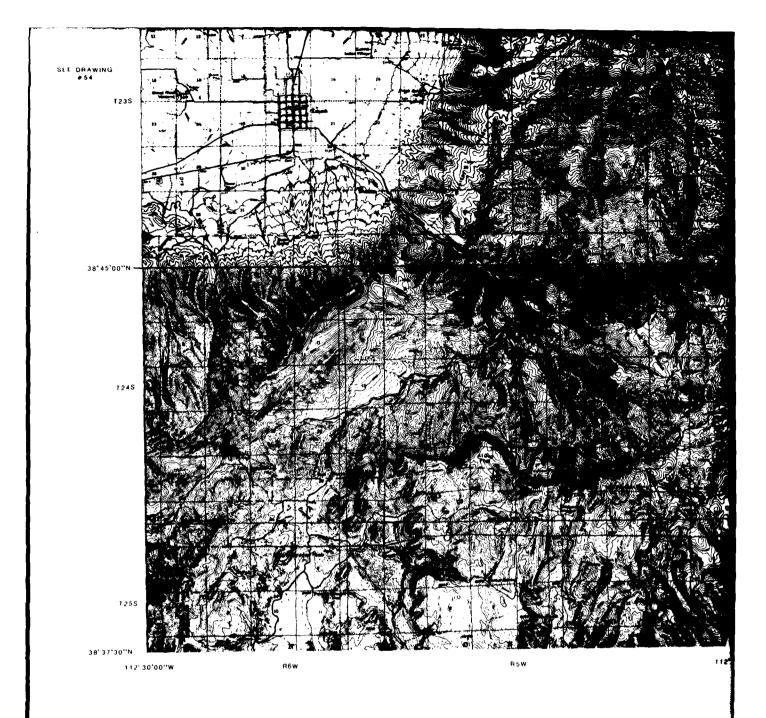
- A. 7% MINUTE TOPOGRAPHIC QUADRANGLE, USGS (1:24,000)
- 8 15 MINUTE TOPOGRAPHIC QUADRANGLE, USGS (1:62,500)
- C. 2 DEGREE TOPOGRAPHIC QUADRANGLE, USGS (1:250,000)
- D. COMPILED BY STEREO PHOTOGRAMMETRIC METHODS BY ERTEC AIRBORNE SYSTEMS (FORMERLY FUGRO GEOMETRICS) AT 1:82,800



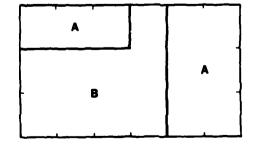




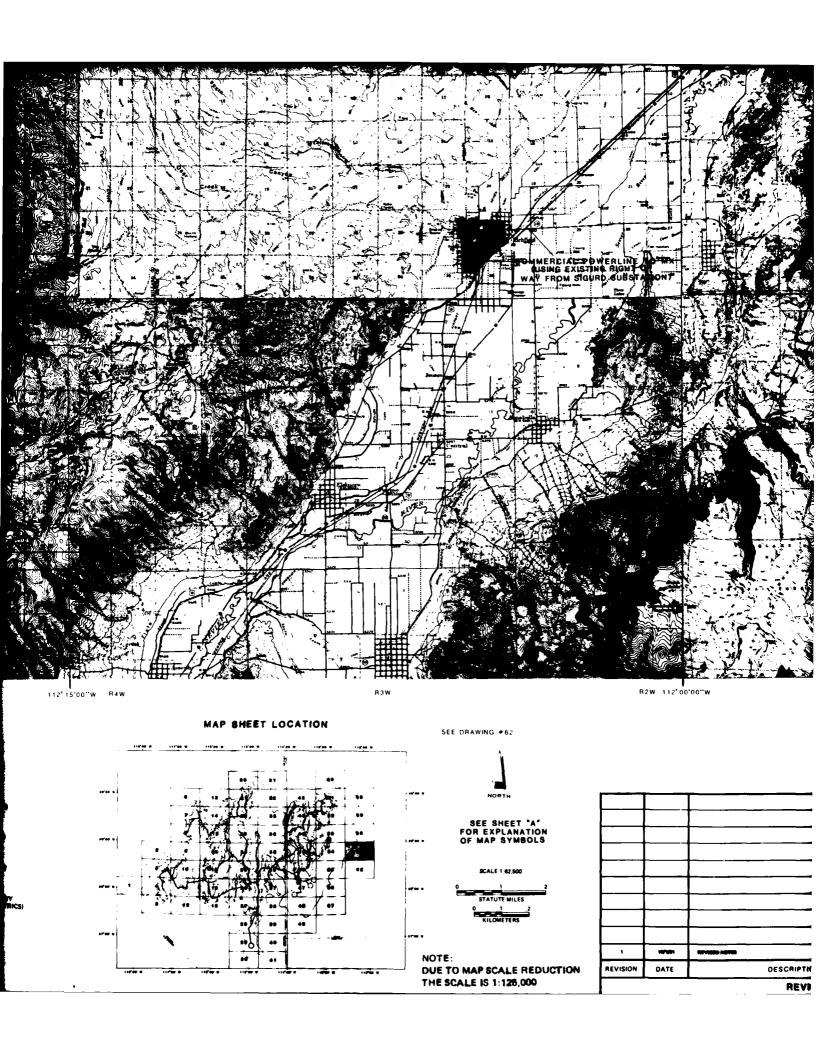


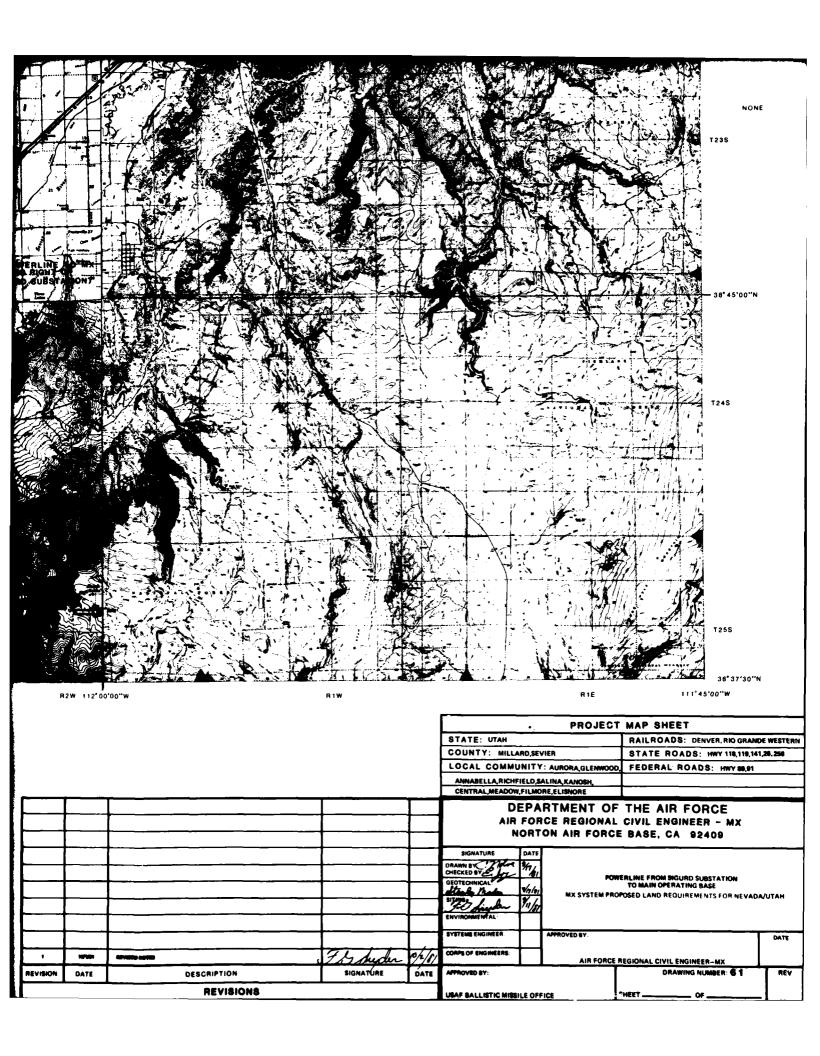


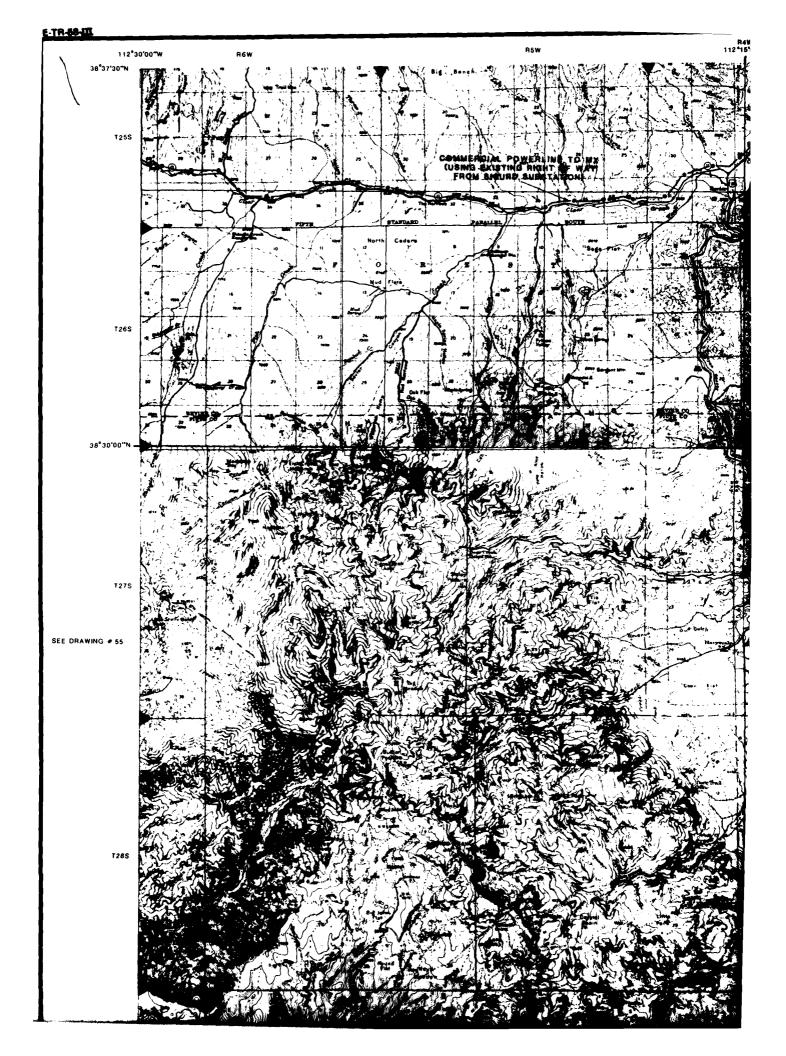
## BASE MAP SOURCE INSET

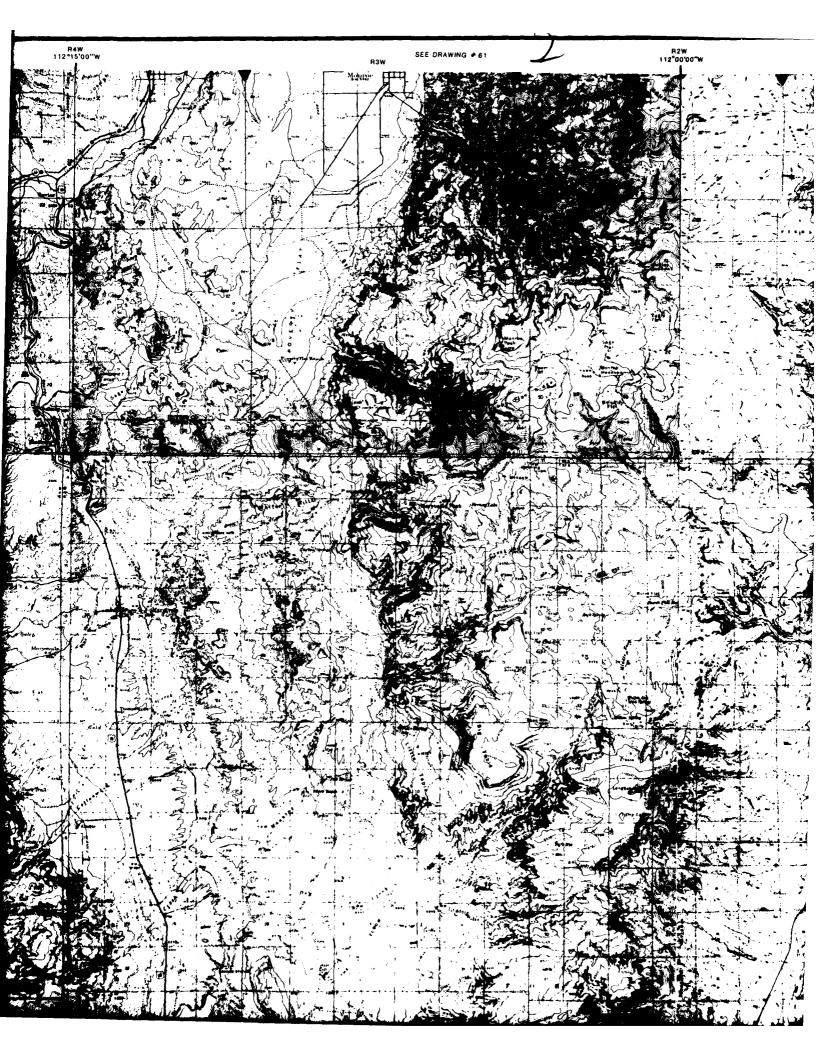


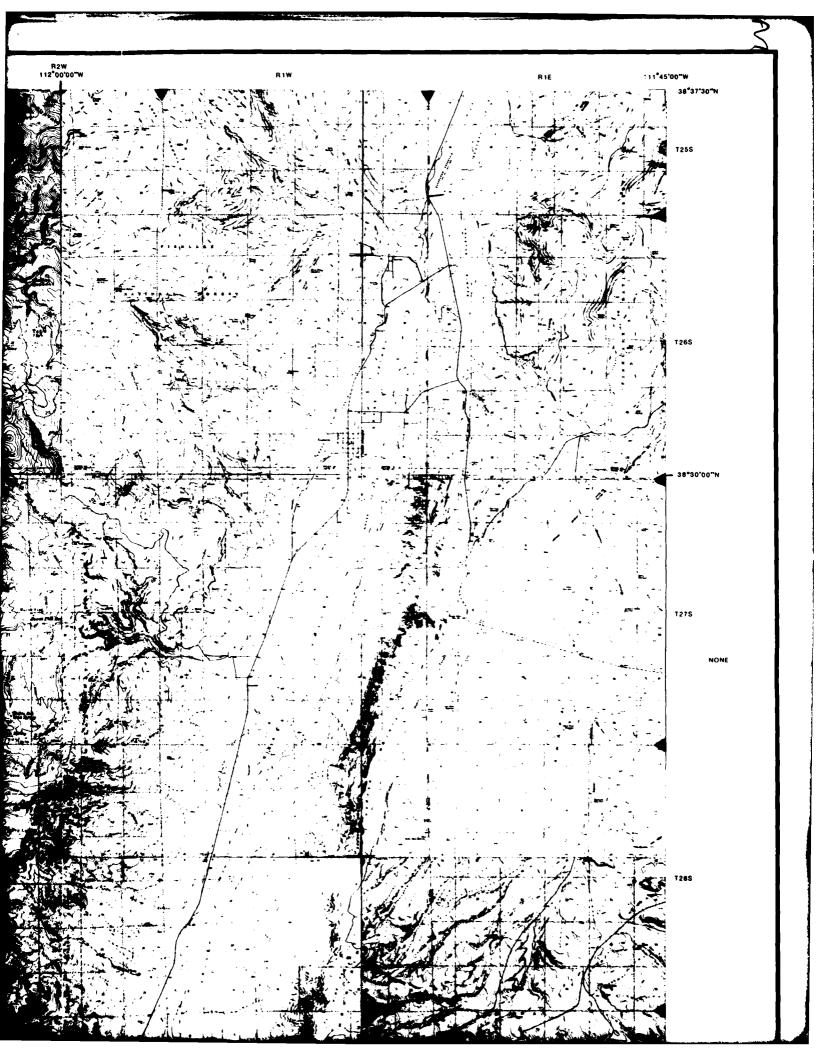
- A. 7% MINUTE TOPOGRAPHIC QUADRANGLE, USGS (1:24,000)
- 8. 15 MINUTE TOPOGRAPHIC QUADRANGLE, USGS (1:82,500)
- C. 2 DEGREE TOPOGRAPHIC QUADRANGLE, USGS (1:250,000)
- D. COMPILED BY STEREO PHOTOGRAMMETRIC METHODS BY ENTEC AIRBORNE SYSTEMS (FORMERLY FUGRO GEOMETRICS) AT 1:82,500

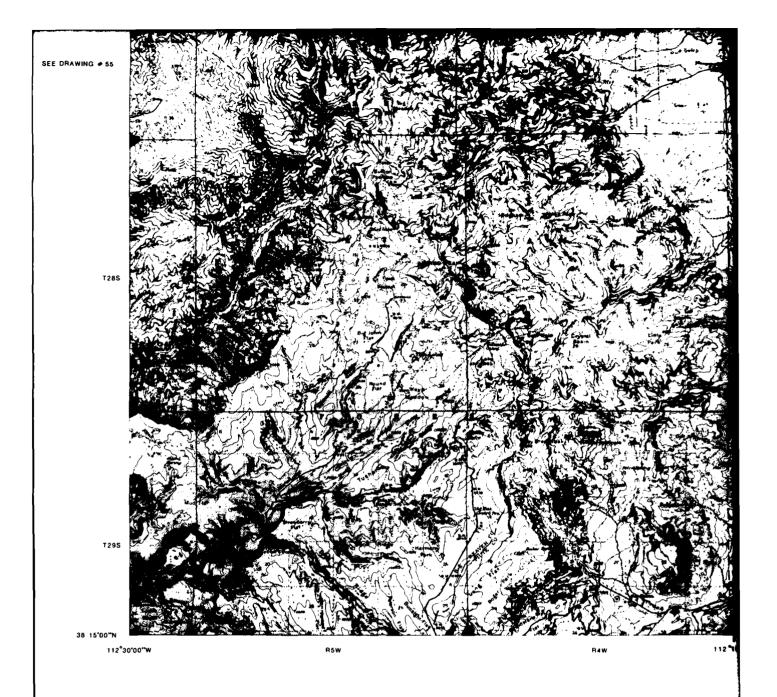


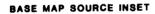


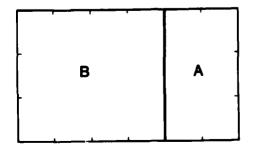












- A 7% MINUTE TOPOGRAPHIC QUADRANGLE, USGS (1 24,000)
- B 15 MINUTE TOPOGRAPHIC QUADRANGLE, USGS (1 62,500)
- C. 2 DEGREE TOPOGRAPHIC QUADRANGLE, USGS (1.250,000)
- D COMPILED BY STEREO PHOTOGRAMMETRIC METHODS BY ERTEC AIRBORNE SYSTEMS (FORMERLY FUGRO GEOMETRICS) AT 1.82,500

